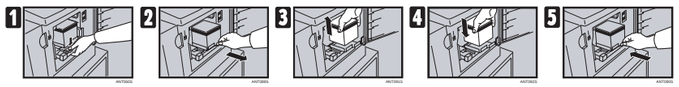
C2758676

Easy Operation Guide

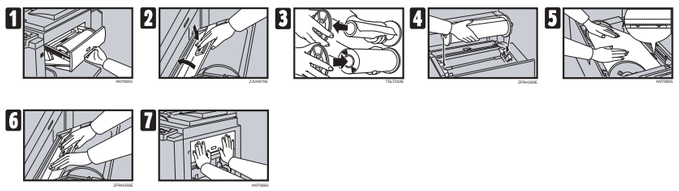
Standard Printing

Loading Paper

Adding Ink

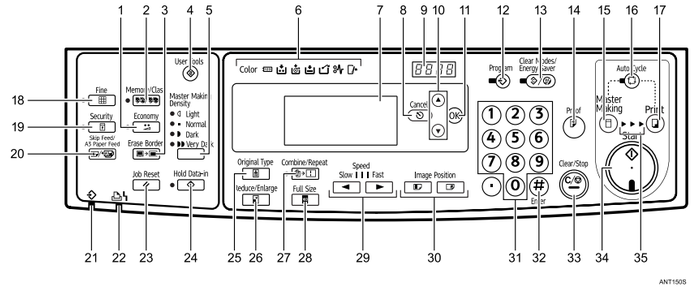


Replacing the Master Roll



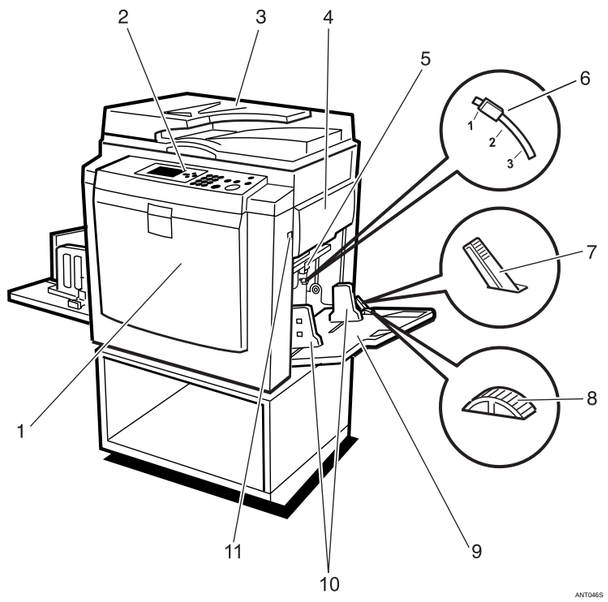
Removing the Used Master

Control Panel



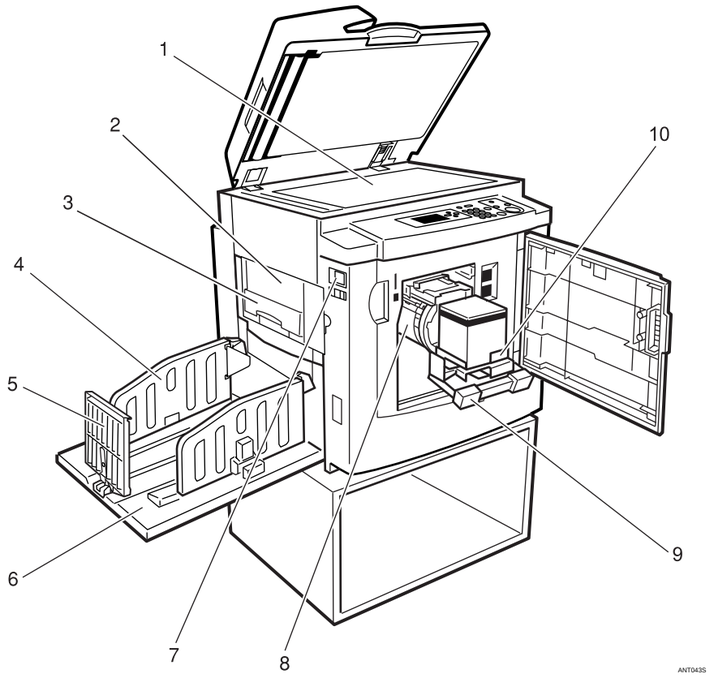
ANT150S

1. 【Economy】key
2. 【Memory/Class】key
3. 【Erase Border】key
4. 【User Tools】keys
5. 【Master Making Density】key
6. Indicators
7. Panel Display
8. 【Cancel】key
9. Counter
10. 【▲】【▼】Keys
11. 【OK】key
12. 【Program】key
13. 【Clear Modes/Energy Saver】key
14. 【Proof】key
15. 【Master Making】mode select key
16. 【Auto Cycle】key
17. 【Print】mode select key
18. 【Fine】keys
19. 【Security】key
20. 【Skip Feed/A3 Paper Feed】key
21. Data In indicator (Green)
22. Error indicator (Red)
23. 【Job Reset】key
24. 【Hold Data-in】key
25. 【Original Type】key
26. 【Reduce/Enlarge】key
27. 【Combine/Repeat】key
28. 【Full Size】key
29. 【◄】and【►】keys (Speed keys)
30. 【Image Position】key
31. Number keys
32. 【#】(Enter) key
33. 【Clear/Stop】key
34. 【Start】key
35. Processing indicators



ANT046S

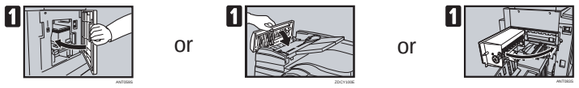
1. Front cover
2. Control panel
3. Auto Document Feeder (option)
4. Master tray
5. Feed roller pressure lever
6. Separation pressure lever
7. Paper feed side plate lock lever
8. Side tray fine adjusting dial
9. Paper feed tray
10. Paper feed side plates
11. Paper feed tray down key



ANT043S

1. Exposure glass
2. Master eject unit
3. Master eject box
4. Paper delivery side plates
5. Paper delivery end plate
6. Paper delivery tray
7. Main switch
8. Drum unit
9. Drum unit lock lever
10. Ink holder

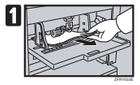
When the Open Cover/Unit Indicator Lights



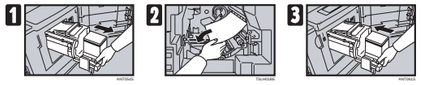
Clearing Misfeeds

Paper Misfeeds in the Paper Feed Section

"🔧 + A"

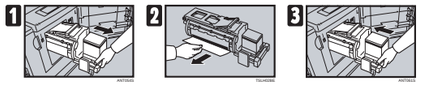


"🔧 + A + B"



Paper Wrapped Around the Drum

"🔧 + B"

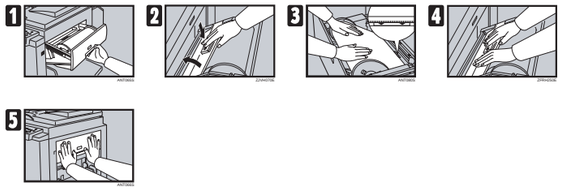


Paper Misfeeds in the Paper Exit Section

"🔧 + C"

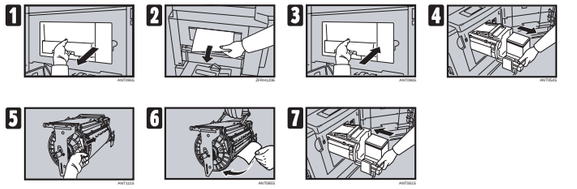
Master Misfeeds in the Master Feed Section

"🔧 + D"



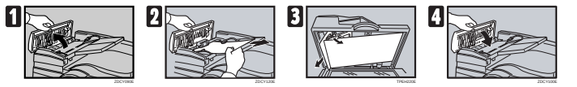
Master Misfeeds in the Master Eject Section

"🔧 + B + E"



Original Misfeeds in the ADF

"🔧 + P"



For details, see *Operating Instructions.*

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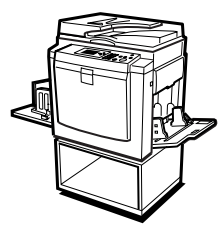
DX 3343
LDD130
DX 3343
3183DNP

Operating Instructions



1 Before Using the Machine
2 Basics
3 Printing Functions
4 Troubleshooting
5 User Tools
6 Remarks
7 Specifications

Read this manual carefully before you use this machine and keep it handy for future reference. For safe and correct use, be sure to read “Safety Information” before using the machine.

Introduction

This manual contains detailed instructions and notes on the operation and use of this machine. For your safety and benefit, read this manual carefully before using the machine. Keep this manual in a handy place for quick reference.

Important

Contents of this manual are subject to change without prior notice. In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

Do not copy or print any item for which reproduction is prohibited by law.

Copying or printing the following items is generally prohibited by local law:

bank notes, revenue stamps, bonds, stock certificates, bank drafts, checks, passports, driver's licenses.

The preceding list is meant as a guide only and is not inclusive. We assume no responsibility for its completeness or accuracy. If you have any questions concerning the legality of copying or printing certain items, consult with your legal advisor.

Notes:

Some illustrations in this manual might be slightly different from the machine.

Certain options might not be available in some countries. For details, please contact your local dealer.

Two kinds of size notation are employed in this manual. With this machine refer to the inch version.

For good print quality, the supplier recommends that you use genuine master and ink from the supplier.

The supplier shall not be responsible for any damage or expense that might result from the use of parts other than genuine parts from the supplier with your office products.

Power Source

120V, 60Hz, 1.7A or more

Please be sure to connect the power cord to a power source as above. For details about power source, see p.119 “Power Connection”.

TABLE OF CONTENTS

Manuals for This Machine **1**
What You Can Do with This Machine **2**
How to Read This Manual **4**
Safety Information **5**
Safety During Operation 5
ENERGY STAR Program **7**
Positions of ⚠WARNING and ⚠CAUTION Labels **8**
Guide to Components **9**
Options **11**
Option List 11
Guide to Major Options 11
Control Panel **12**
Panel Display 14

1. Before Using the Machine

Originals **17**
Recommended Sizes and Weights of Originals 17
Print Paper **19**
Non-recommended Paper 20
Storing Paper 21
Printing Size **22**

2. Basics

Printing Preparations **23**
Using the Paper Feed Tray and Delivery Tray 23
After Printing **26**
Folding the Paper Feed Tray and Delivery Tray 26
Placing Originals **28**
Placing Originals on the Exposure Glass 28
Placing Originals in the Auto Document Feeder 28
Basic Procedure **30**
Energy Saver Mode 32
Auto Reset 32
Printing on Thick or Thin Paper **33**
Feed Roller Pressure Lever Position 33
Separation Pressure Lever Position 34
Auto Cycle **35**
Original Type 36
Sample Print and Adjustment **37**
Adjusting the Print Image Position 37
Changing the Printing Speed **40**

3. Printing Functions

Printing Functions 41
Master Making Density 41
Fine Mode 42
Preset Reduce/Enlarge 42
Erase Border 44
Economy Mode 45
Memory/Class 45
Class Mode (print per class) 47
Memory Mode (print per original) 48
Recall Program 50
Class/Year 54
Combine 56
Repeat 59
Skip Feed/A3 Paper Feed 60
Security Mode 61
Online Printing 62
Hold Data-in 62
Program 63
Registering Print Settings 63
Recalling a Program 64
Make Color Prints 65
Changing the Color Drum Unit 65
Making Color Prints 66
Printing in Two Colors 67
Combination Chart 68

4. Troubleshooting

If Your Machine Does Not Operate as You Want 69
Printing Problems 70
Printing Problems When Using Combine Mode 70
Loading Paper into the Paper Feed Tray 71
Replenishing Paper 71
Changing the Paper Size 72
When the Add Ink Indicator ( ) Lights 73
Master Roll Replacement 77
Placing a New Roll of Tape in the Tape Dispenser (Optional) 79
Clearing Misfeeds 80
"+ P" Original Misfeeds Occur in the Auto Document Feeder 80
"+ A" Paper Misfeeds in the Paper Feed Section 83
"+ B" Paper Wrapped around the Drum 83
"+ C" Paper Misfeeds in the Paper Exit Section 85
"+ D" Master Misfeeds in the Master Feed Section 88
"+ A + B" Paper Misfeeds in the Paper Feed Section 89
"+ B + E" Master Misfeeds in the Master Eject Section 91
When the Open Cover/Unit Indicator ( ) Lights and a Message is Displayed 94
Front Cover is Open 94
Cover of Optional Auto Document Feeder is Open 94
Master Eject Unit is Open 94

When the Master End Indicator (📻) Lights and a Message is Displayed 95
Master Feeding Cover is Open 95
Master Tray is Not Set Properly 95
When the Master Eject Indicator (📤) Lights 96
When Other Indicators Light 97
Poor Printing 98
Dirt on the Back Side of Paper 98
Dirt on the Front Side of Paper (Black Line/Stain) 100
Blank Prints or Incomplete Prints 101

5. User Tools

Accessing the User Tools 105
Quitting User Tools 105
User Tools Menu 106
1 Counter 106
2 System 106
3 Set Operation Mode 107
4 Initial Settings 108
5 Mode Settings 109
6 Administrator Tools 110
7 Online Settings 111
User Code 113
Entering the User Code to Use the Machine 113
Clearing the Counter 114

6. Remarks

Operation Notes 115
General Cautions 115
Print Paper 117
Originals 117
Where to Put Your Machine 118
Environmental Conditions 118
Power Connection 119
Access to Machine 119
Maintaining the Machine 120
Main Frame 120
Optional Document Feeder 121

7. Specifications

Main Frame 123
Auto Document Feeder (ADF) 127
Consumables 128

INDEX 129

Manuals for This Machine

The following manuals describe the operational procedures of this machine. For particular functions, see the relevant parts of the manual.

Note

❒ Manuals provided are specific to machine type.

❖ **Easy Operation Guide**
Describes information about the control panel and basic operations.

❖ **Operating Instructions (this manual)**
Describes operations, functions, User Tools (initial setting, mode setting, etc.) and troubleshooting.

What You Can Do with This Machine

Below is a quick summary of this machine's features and where to look in this manual for more information.

❖ **Basic Procedure**
See p.30 “Basic Procedure”.

❖ **Printing on Thick or Thin Paper**
See p.33 “Printing on Thick or Thin Paper”.

❖ **Selecting Original Type**
See p.36 “Original Type”.

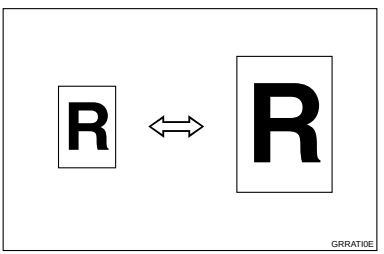
❖ **Adjusting the Print Image Position**
See p.37 “Adjusting the Print Image Position”.

❖ **Adjusting the Print Image Density**
See p.41 “Master Making Density”.

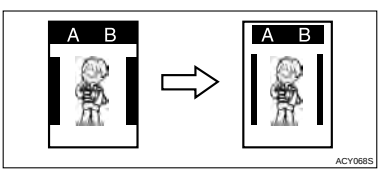
❖ **Changing the Print Speed**
See p.40 “Changing the Printing Speed”.

❖ **Fine Mode**
See p.42 “Fine Mode”.

❖ **Reducing and Enlarging Using Preset Ratios**
See p.42 “Preset Reduce/Enlarge”.

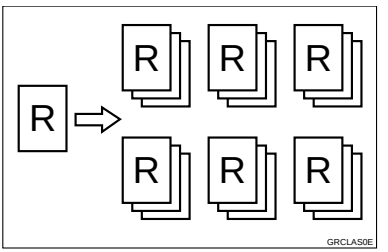


❖ **Erasing Edge Margins**
See p.44 “Erase Border”.

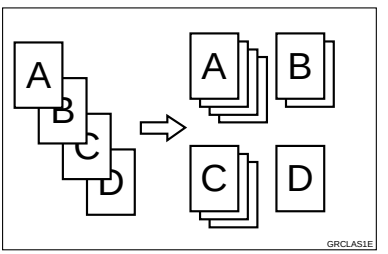


❖ **Saving Ink (Economy Mode)**
See p.45 “Economy Mode”.

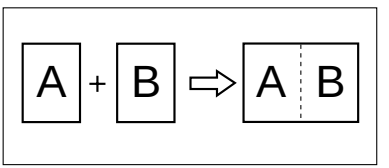
❖ **Printing per Class (Class Mode)**
See p.47 “Class Mode (print per class)”.



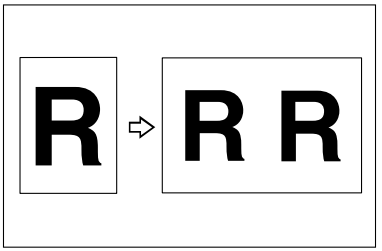
❖ **Printing per Original (Memory Mode)**
See p.48 “Memory Mode (print per original)”.



❖ **Combining Originals onto One Print**
See p.56 “Combine”.



❖ **Repeating Original onto One Print**
See p.59 “Repeat”.



❖ **Skip Feed/A3 Paper Feed Printing**
See p.60 “Skip Feed/A3 Paper Feed”.

❖ **Printing Secret Documents (Security Mode)**
See p.61 “Security Mode”.

❖ **Making Color Prints**
See p.65 “Make Color Prints”.

❖ **Printing in Two Colors**
See p.67 “Printing in Two Colors”.

How to Read This Manual

Symbols

This manual uses the following symbols:

⚠ ***WARNING:***

Indicates important safety notes.

Ignoring these notes could result in serious injury or death. Be sure to read these notes. They can be found in the "Safety Information" section.

⚠ ***CAUTION:***

Indicates important safety notes.

Ignoring these notes could result in moderate or minor injury, or damage to the machine or to property. Be sure to read these notes. They can be found in the "Safety Information" section.

Important

Indicates points to pay attention to when using the machine, and explanations of likely causes of paper misfeeds, damage to originals, or loss of data. Be sure to read these explanations.

Note

Indicates supplementary explanations of the machine's functions, and instructions on resolving user errors.

Reference

This symbol is located at the end of sections. It indicates where you can find further relevant information.

[ ]

Indicates the names of keys that appear on the machine's display panel.

【 】

Indicates the names of keys on the machine's control panel.

Safety Information

When using this machine, the following safety precautions should always be followed.

Safety During Operation

In this manual, the following important symbols are used:

⚠ ***WARNING:***
Indicates a potentially hazardous situation which, if instructions are not followed, could result in death or serious injury.

⚠ ***CAUTION:***
Indicates a potentially hazardous situation which, if instructions are not followed, may result in minor or moderate injury or damage to property.

⚠ ***WARNING:***

- ***Do not damage, break or make any modifications to the power cord. Do not place heavy objects on it. Do not pull it hard nor bend it more than necessary. These actions could cause an electric shock or fire.***
- ***Disconnect the power plug (by pulling the plug, not the cable) if the power cable or plug becomes frayed or otherwise damaged.***
- ***To avoid hazardous electric shock, do not remove any covers or screws other than those specified in this manual.***
- ***Turn off the power and disconnect the power plug (by pulling the plug, not the cable) if any of the following occurs:***
  - ***You spill something into the machine.***
  - ***You suspect that your machine needs service or repair.***
  - ***The external housing of your machine has been damaged.***
- ***Keep the machine away from flammable liquids, gases, and aerosols. A fire or an electric shock might occur.***
- ***Connect the power cord directly into a wall outlet and never use an extension cord.***
- ***Only connect the machine to the power source described in this manual.***
- ***Disposal can take place at our authorized dealer or at appropriate collection sites.***

⚠ ***CAUTION:***

- *After you move the machine, use the caster fixture to fix it in place. Otherwise the machine might move or come down to cause an injury.*
- *If you use the machine in a confined space, make sure there is a continuous air turnover.*
- *Keep the machine away from humidity and dust. Otherwise a fire or an electric shock might occur.*
- *Protect the machine from dampness or wet weather, such as rain and snow.*
- *Do not place the machine on an unstable or tilted surface. If it topples over, an injury might occur.*
- *Unplug the power cord from the wall outlet before you move the machine. While moving the machine, you should take care that the power cord will not be damaged under the machine.*
- *When you disconnect the power plug from the wall outlet, always pull the plug (not the cable).*
- *Do not allow paper clips, staples, or other small metallic objects to fall inside the machine.*
- *For environmental reasons, do not dispose of the machine or expended supply waste at household waste collection points. Disposal can take place at an authorized dealer.*
- *When disposing of a used ink container, reattach the cap to prevent ink from splattering.*
- *Be careful not to get ink on your clothes when replacing an ink container. Ink stains on clothes are hard to remove.*
- *Be careful not to cut yourself on any sharp edges when you reach inside the machine to remove misfed sheets of paper or masters.*
- *If ink comes into contact with your eyes, rinse immediately in running water. For other symptoms, consult a doctor.*
- *Keep the ink or ink container out of reach of children.*
- *If ink is ingested, induce vomiting by drinking a strong saline solution. Consult a doctor immediately.*
- *If your skin comes into contact with ink, wash the affected area thoroughly with soap and water.*
- *While printing, do not touch the belt at the end of the paper delivery tray. Otherwise, an injury might occur.*
- *Our products are engineered to meet the high standards of quality and functionality, and we recommend that you only use the expendable supplies available at an authorized dealer.*

ENERGY STAR Program

❖ ENERGY STAR® Program Requirements for Imaging Equipment

This company is a participant in the ENERGY STAR® Program.

This machine is compliant with the regulations specified by the ENERGY STAR® Program.

The ENERGY STAR® Program Requirements for Imaging Equipment encourage energy conservation by promoting energy efficient computers and other office equipment.

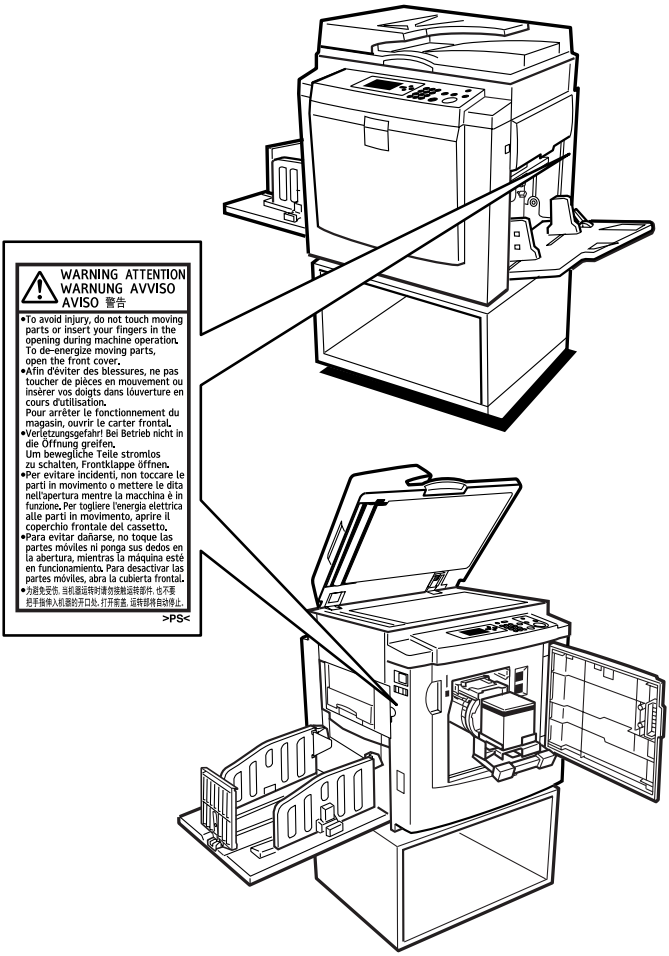
The program backs the development and dissemination of products that feature energy saving functions.

It is an open program in which manufacturers participate voluntarily.

Targeted products are computers, monitors, printers, facsimiles, copiers, scanners, and digital duplicator. Energy Star standards and logos are internationally uniform.

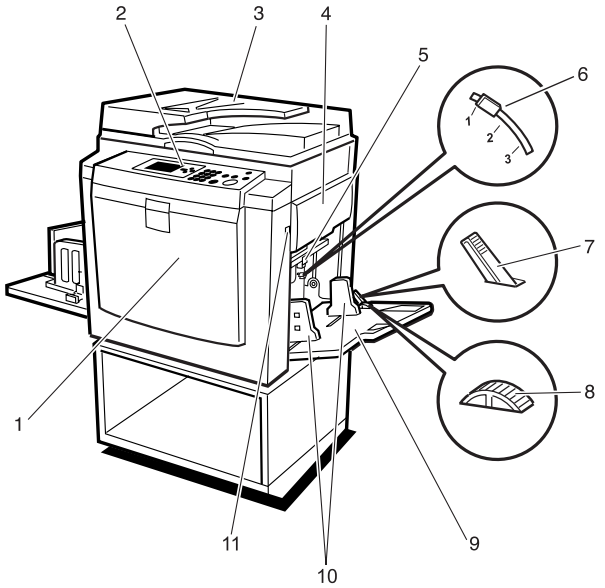
Positions of ⚠WARNING and ⚠CAUTION Labels

This machine has labels for ⚠WARNING and ⚠CAUTION at the positions shown below. For safety, please follow the instructions and handle the machine as indicated.


WARNING ATTENTION
WARNUNG AVVISO
AVISO 警告
•To avoid injury, do not touch moving parts or insert your fingers in the opening during machine operation. To de-energize moving parts, open the front cover.
•Afin d'éviter des blessures, ne pas toucher de pièces en mouvement ou insérer vos doigts dans louverture en cours d'utilisation. Pour arrêter le fonctionnement du magasin, ouvrir le carter frontal.
•Verletzungsgefahr! Bei Betrieb nicht in die Öffnung greifen. Um bewegliche Teile stromlos zu schalten, Frontklappe öffnen.
•Per evitare incidenti, non toccare le parti in movimento o mettere le dita nell'apertura mentre la macchina è in funzione. Per togliere l'energia elettrica alle parti in movimento, aprire il coperchio frontale del cassetto.
•Para evitar dañarse, no toque las partes móviles ni ponga sus dedos en la abertura, mientras la máquina esté en funcionamiento. Para desactivar las partes móviles, abra la cubierta frontal.
•为避免受伤, 当机器运转时请勿接触运转部件, 也不要
把手指伸入机器的开口处. 打开前盖, 运转部件自动停止.
>PS<

ANT150S

Guide to Components



1. Front cover
Open for access to the inside of the machine.

2. Control panel
Operator controls and indicators are located here. See p.12 “Control Panel”.

3. Exposure glass cover (optional) or Auto Document Feeder (optional)
Lower this cover over an original on the exposure glass. If you have the ADF, load a stack of originals here. They will be fed automatically, one by one.
(The illustration shows the ADF.)

4. Master tray
Open this tray when installing the master.

5. Feed roller pressure lever
Use to adjust the contact pressure of the paper feed roller according to paper thickness.

6. Separation pressure lever
Use to prevent double feed.

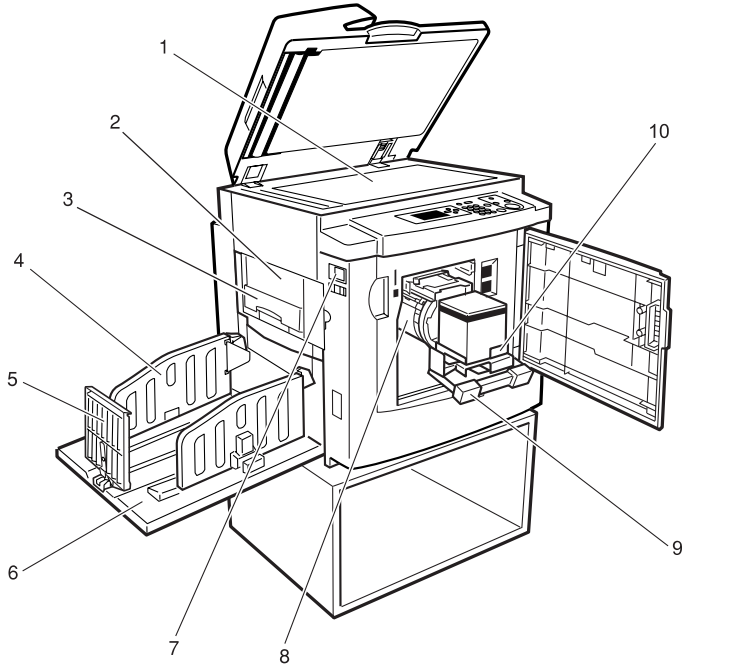
7. Paper feed side plate lock lever
Use to lock or unlock the paper feed side plates.

8. Side tray fine adjusting dial
Use to shift the paper feed tray sideways.

9. Paper feed tray
Set paper on this tray for printing.

10. Paper feed side plates
Use to prevent paper skew.

11. Paper feed tray down key
Press to lower the paper feed tray.



1. **Exposure glass**
Use to set the original.

2. **Master eject unit**
Open to remove the misfed master.

3. **Master eject box**
Used masters are stored here.

4. **Paper delivery side plates**
Use to align the prints on the paper delivery tray.

5. **Paper delivery end plate**
Use to align the leading edge of prints.

6. **Paper delivery tray**
Completed prints are delivered here.

7. **Main switch**
Use to turn the power on or off.

8. **Drum unit**
The master is wrapped around this unit.

9. **Drum unit lock lever**
Lift to unlock and pull out the drum unit.

10. **Ink holder**
Set the ink cartridge in this holder.

Options

Option List

Options	Model Name
Auto Document Feeder (ADF)	DF Type 20
Exposure Glass Cover	Platen Cover Type 1018
Drum Unit	Color Drum Type 20 LG
Tape Dispenser	Priport Tape Maker Type 20
Printer Controller	Printer Unit VC-20 (Non Network Connectable) Printer Unit Type 4545 (Network Connectable)
Key Counter	–

Note

❒ Printer Unit VC-20 and Printer Unit Type 4545 cannot be used at the same time.

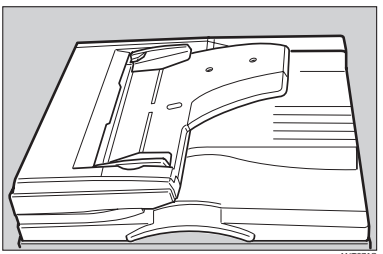
❒ Even if both units are connected, by default only Printer Unit Type 4545 can be used.

❒ Printer Unit VC-20 is not available on the network. If Printer Unit VC-20 is connected to your printer server via USB, it cannot be used as a network printer.

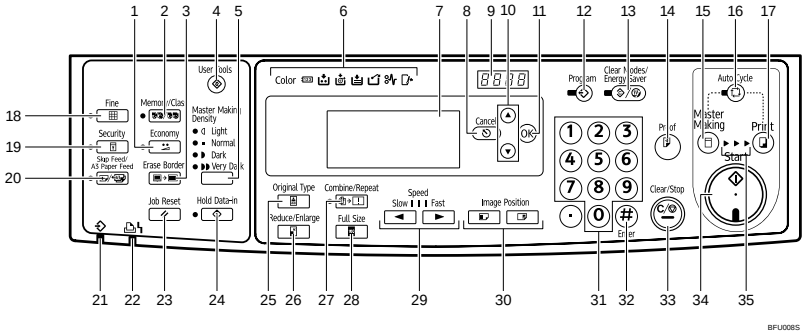
Guide to Major Options

❖ **Auto Document Feeder (ADF)**

Load a stack of originals here. They will be fed automatically, one by one.



Control Panel



1. 【Economy】 key

Press to save ink. See p.45 "Economy Mode".

2. 【Memory/Class】 key

Press to select Memory or Class mode. See p.47 "Class Mode (print per class)" or p.48 "Memory Mode (print per original)".

3. 【Erase Border】 key

Press to select erase margins on the prints. See p.44 "Erase Border".

4. 【User Tools】 key

Press to change the default settings to suit your requirements. See p.105 "User Tools".

5. 【Master Making Density】 key

Press to make prints darker or lighter. See p.41 "Master Making Density".

6. Indicators

Show errors and machine status.

Color: Color Drum indicator

: Key Counter indicator

See p.97 "When Other Indicators Light".

: Add Ink indicator

See p.73 "When the Add Ink Indicator ( ) Lights".

: Master End indicator

See p.95 "When the Master End Indicator ( ) Lights and a Message is Displayed".

: Load Paper indicator

See p.71 "Loading Paper into the Paper Feed Tray".

: Master Eject indicator

See p.96 "When the Master Eject Indicator ( ) Lights".

: Misfeed indicator

See p.80 " Clearing Misfeeds".

: Open Cover/Unit indicator

See p.94 "When the Open Cover/Unit Indicator ( ) Lights and a Message is Displayed".

7. Panel Display

The panel display shows the machine status, error messages, and function menus.

8. 【Cancel】 key

Press to cancel a selection or an entry, and to return to the previous display.

9. Counter

Shows the number of prints entered. While printing, it shows the remainder that is to be printed.

10. 【▲】【▼】 keys

Press to select an item on the panel display.

11. 【OK】 key

Press to confirm a selection or an entry.

12. 【Program】 key

Press to input or recall user programs. See p.63 "Program".

13. 【Clear Modes/Energy Saver】 key

- Clear Modes
  Press to clear the previously entered job settings.
- Energy Saver
  Press to switch to and from Energy Saver Mode p.32 “Energy Saver Mode”.

14. 【Proof】 key

Press to make proof prints.

15. 【Master Making】 mode select key

Press to select the master making mode.

16. 【Auto Cycle】 key

Press to make masters and prints in a single operation. See p.30 “Basic Procedure”.

17. Print mode select key

Press to select the print mode.

18. 【Fine】 key

Press to select the fine image. See p.42 “Fine Mode”.

19. 【Security】 key

Press to make prints of secret documents. See p.61 “Security Mode”.

20. 【Skip Feed/A3 Paper Feed】 key

Press to select skip feed or A3 Paper Feed printing. See p.60 “Skip Feed/A3 Paper Feed”.

21. Data In indicator (Green)

- On: Data waiting for Master Making and printing is in the machine.
- Blinking: Data is being received, or Master Making or printing is in progress.
- Off: Master Making and printing are completed.

22. Error indicator (Red)

- On: An error has occurred. Master Making and printing stops.
- Off: Normal status

23. 【Job Reset】 key

Press to cancel the data from an optional printer controller.

24. 【Hold Data-in】 key

Press to reject the online print temporarily.

25. 【Original Type】 key

Press to select Text, Photo, Text/Photo, Pale, or Pencil mode. See p.36 “Original Type”.

26. 【Reduce/Enlarge】 key

Press to reduce or enlarge the image by preset ratios. See p.42 “Preset Reduce/Enlarge”.

27. 【Combine/Repeat】 key

Press to combine two originals onto one print. See p.56 “Combine”.

Press to repeat the image of an original on one print. See p.59 “Repeat”.

28. 【Full Size】 key

Press to make full size prints.

29. 【◄】 and 【►】 keys (Speed keys)

Press to adjust the printing speed. See p.40 “Changing the Printing Speed”.

30. 【Image Position】 key

Press to shift the image forwards or backwards. See p.37 “Adjusting the Print Image Position”.

31. Number keys

Press to enter the desired number of prints and data for selected modes.

32. 【#】 (Enter) key

Press to enter data in selected modes.

33. 【Clear/Stop】 key

Press to cancel a number you have entered or to stop printing.

34. 【Start】 key

Press to start making masters or printing.

35. Processing indicators

Shows the process of making master to printing.

Panel Display

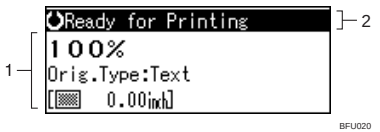
The panel display shows the machine status, error messages, and function menus.

Important

❒ Do not subject the panel display to strong impact or a force equivalent to 30N or more, otherwise it could be damaged.

Note

❒ When you select an item on the panel display, it is highlighted (e.g. 100).



1. **Menu for the function selected**

2. **Machine status or messages**

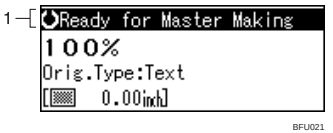
❖ **Common keys**

【OK】key	Press to confirm a selection or an entry.
【Cancel】key	Press to cancel a selection or entry, and to return to the previous display.
【▲】【▼】keys	Press to select items on the panel display.

Panel Display Layout

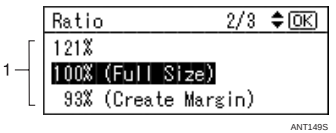
The basic elements of the panel display are explained below. Understanding their meaning helps you use this machine's features quickly and easily.

❖ Sample display when selecting the【Reduce/Enlarge】key



1. **Machine status or messages**

When the【**Reduce/Enlarge**】key is pressed, the following display is shown.



1. **Functions and settings available:**

- Press the【▲】【▼】keys to select an item.
- Press the【**OK**】key to confirm your settings.
- Press the【**Cancel**】key to return to the previous display.

Originals

Recommended Sizes and Weights of Originals

❖ Metric version

Where original is placed	Original size	Original weight
Exposure glass	Up to A3 *1	--
ADF	Maximum: 297 mm × 432 mm Minimum: 105 mm × 128 mm	52–128 g/m^2

*1 When using an A3 size original, be sure to check the printed paper size and print size, and use the Reduce or Combine functions.

❖ Inch version

Where original is placed	Original size	Original weight
Exposure glass	Up to 11" × 17" ▱ *1	--
ADF	Maximum: 11.7" × 17.0" Minimum: 4.1 " × 5.0 "	14–28 lb.

*1 When using an 11" × 17" size original, be sure to check the printed paper size and print size, and use the Reduce or Combine functions.

Note

❒ The maximum number of originals that can be placed in the ADF is about 30 (80 g/m^2, 20 lb.).

❒ If you do not lift the exposure glass cover more than 30° when you place another original, the machine might not detect the next original correctly.

Non compatible originals for the Auto Document Feeder (ADF)

Placing the following types of originals in the ADF can cause paper misfeeds or result in damage to the originals. Place these originals on the exposure glass instead.

- Originals other than those specified on p.17 “Recommended Sizes and Weights of Originals”
- Perforated or torn originals
- Curled, folded, or creased originals
- Pasted originals
- Originals with any kind of coating, such as thermal fax paper, art paper, aluminum foil, carbon paper, or conductive paper
- Originals with indexes, tags, other projecting parts
- Stapled or clipped original
- Sticky originals such as translucent paper
- Thin originals that have low stiffness
- Thick originals such as postcards
- Bound originals such as books
- Transparent originals such as OHP transparencies or translucent paper

Print Paper

The following limitations apply:

	Paper Size		Paper Weight
	Metric	**Inch**	
Paper feed tray	A3 [*1], B4 JIS, A4, B5 JIS, A5, B6 JIS, A6 Others (Vertical: 90 - 268 mm, Horizontal: 148 - 388 mm)	$8^1/_2$" × 14", $8^1/_2$" × 11", $5^1/_2$" × $8^1/_2$", 8" × 13" Others (Vertical: 3.6" - 10.5", Horizontal: 5.9" - 15.2")	47.1 - 209.3 g/m², 12.5 - 55.6 lb.

[*1] For details about how to print on A3, see p.60 “A3 Paper Feed”.

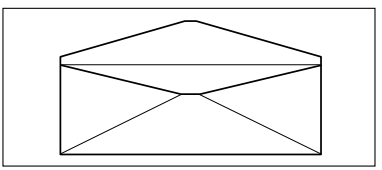
Note

- ❒ Paper with a thickness of 47.1 - 209.3 g/m², 12.5 - 55.7 lb. can be used. Plain paper of 52.5 - 81.5 g/m2, 14 - 21.7 lb. is recommended. However, when using a thickness less than 52.5 g/m², 14 lb. or greater than 81.6 g/m², 21.7 lb., it is advised to select printing speed to setting 1.
- ❒ About 1,000 sheets of paper with a 64 g/m², 17 lb. thickness is the standard amount that can be set in the paper feed tray. This amount changes depending on the paper thickness. In general, set paper at a height less than 105 mm.
- ❒ When using paper that easily curls or waves in humidity, if there is high humidity (more than 80%), set less than 500 sheets in the paper feed tray.
- ❒ Paper with a length of 90 - 297 mm, 3.5" - 11.7" and width of 140 - 420 mm, 5.5" - 16.5" can be set in the paper feed tray. However, when using a paper size that exceeds 275 mm length and 395 mm width, specify A3 Paper Feed. Specifying this function sets the printing speed to 80 cpm and the print position to -10 mm, 0.4".
- ❒ Do not use curled or waved paper. Use paper with less than 5 mm, 0.2" curl and 3 mm, 0.1" wave.
- ❒ When paper feed problems arise, try using a slower print speed.

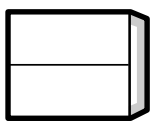
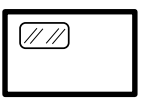
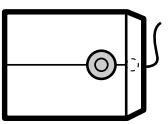
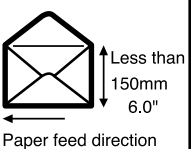
Non-recommended Paper

The following types of paper are not recommended for this machine:

- Roughly cut paper
- Paper of different thickness and types in the same stack
- Envelopes heavier than 85 g/m^2, 22.6 lb.
- Folded, curled, creased, or damaged paper
- Damp paper
- Torn paper
- Slippery paper
- Rough paper
- Paper with any kind of coating (such as carbon)
- Short grain paper
- Thin paper that has low stiffness
- Paper that is prone to generate a lot of paper dust
- Grained paper loaded with the direction of the grain perpendicular to the feed direction
- Certain types of long thin envelopes.
  E.g. international mail envelopes



- The following types of envelopes

Envelopes with glue or gum	Envelopes with windows	Envelopes with round tags	Open envelopes
			

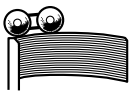
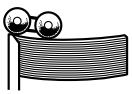
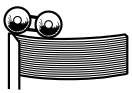
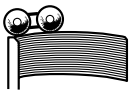
Note

❒ Do not use inkjet paper. It does not absorb ink well, print will smudge if rubbed, and the back of paper may be dirtied.

❒ If you print on rough grained paper, the print image might be blurred.

Important

❒ Correct curls in the paper before placing it in the machine. When you cannot correct the paper curl, stack the paper with the curl face down or face up as shown in the illustration. If the paper is curled, it might wrap around the drum or stains might appear.

	Right	Wrong
Thin Paper		
Thick Paper		

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Storing Paper

Note

❒ When storing paper, the following precautions should always be taken:

- Do not store paper where it will be exposed to direct sunlight.
- Avoid storing paper in humid (greater than 70%) areas.
- Store on a flat surface.

❒ Keep open reams of paper in the package and store as you would unopened paper.

Printing Size

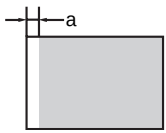
Maximum print size

210 × 355 mm, 8.3" × 14.0"

At low temperatures, the maximum print size may be somewhat smaller.

Range that cannot be printed

The first 5 mm, 0.2" of the leading edge cannot be printed. When using the optional Auto Document Feeder, the first 5 mm, 0.2", of the leading edge as well as the last 2 mm, 0.08", of the trailing edge cannot be printed.

Original	Print
	

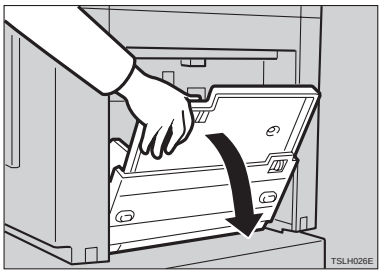
a: 5 mm, 0.2"

Printing Preparations

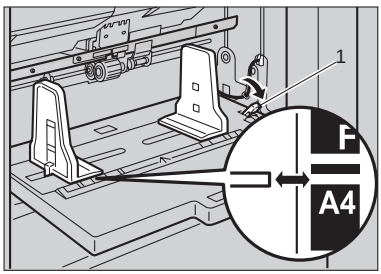
Using the Paper Feed Tray and Delivery Tray

Loading Paper

1 **Carefully open the paper feed tray.**

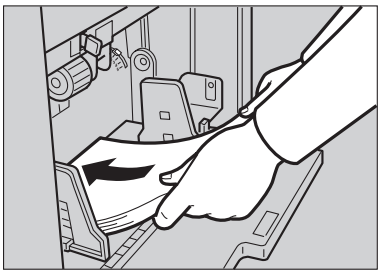


2 **Shift the paper feed side plates lock lever forward. Adjust the side plates to match the paper size.**



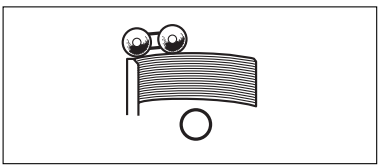
1: Paper Feed Side Plates Lock Lever

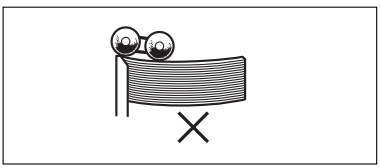
3 **Load paper into the paper feed tray.**



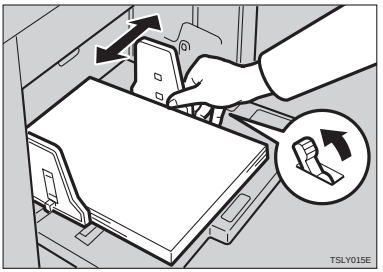
Note

❒ Correct the paper curl before setting the paper. If you cannot do so, stack the paper with the curl face down as shown.



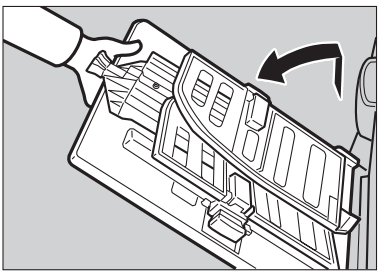


4 **Make sure that the paper feed side plates touch the paper lightly. Shift the lock lever to its original position.**

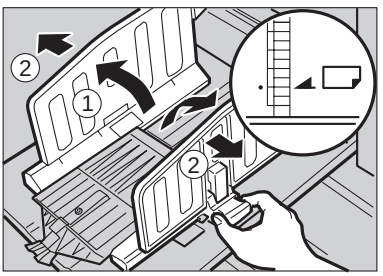


Setting Up the Paper Delivery Tray

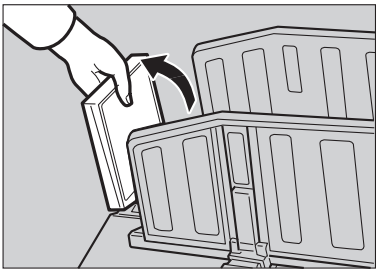
1 **Open the paper delivery tray.**



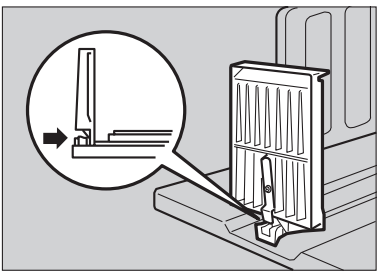
2 **Lift the paper delivery side plates and adjust them to the paper size.**



3 **Lift the paper delivery end plate and move it to match the print paper size.**



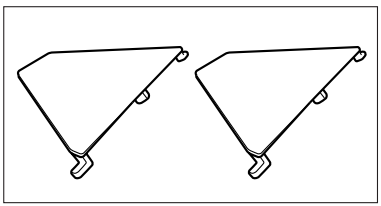
4 **Lift the paper delivery end plate and adjust it to match the paper size.**



Using the side plate guides

When printing on A4□, 8 1/2" × 11"□, B5 JIS□ □size paper and thin paper, you should attach the side plate guides to the side plates of the Paper Delivery Tray. Using the side plate guides allows you to properly assemble the printed papers on the Paper Delivery Tray.

Side plate guides

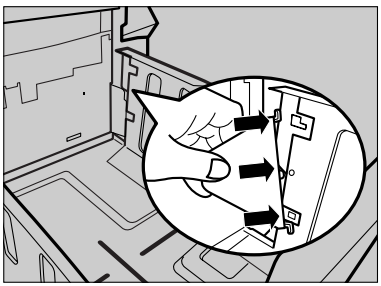


ANT040S

Note

❒ Side Plate guides come equipped with the machine.

❶ Insert the protruding portion into the Side Plate holes.

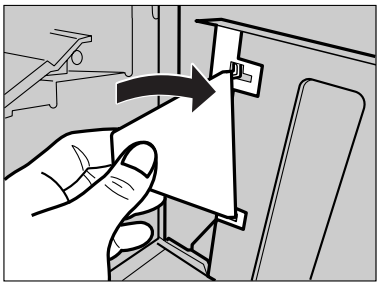


ANT041S

Note

❒ Insert the middle protruding portion first followed by the upper and lower portions.

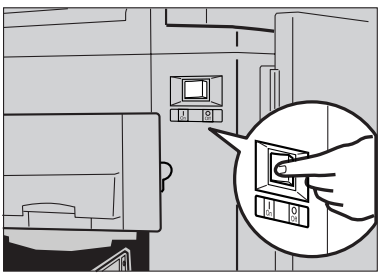
❷ Turn the Side Plate Guide to the direction shown by the arrow, and make sure it is fixed.



ANT042S

❸ After attaching the Side Plate Guide on one side, repeat the same process for the other side.

5 Turn on the main switch.



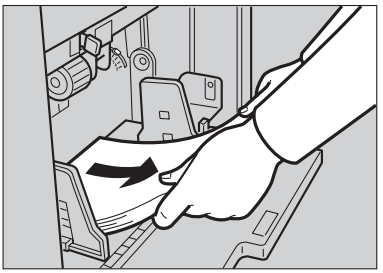
ANT076S

After Printing

This section shows you how to return the paper feed tray and paper delivery tray to their original positions.

Folding the Paper Feed Tray and Delivery Tray

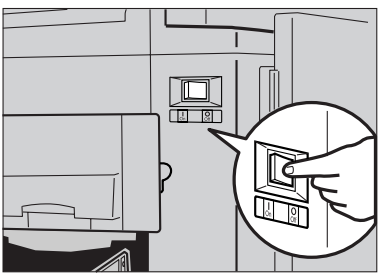
1 **Remove the paper from the paper feed tray.**



ANT073S

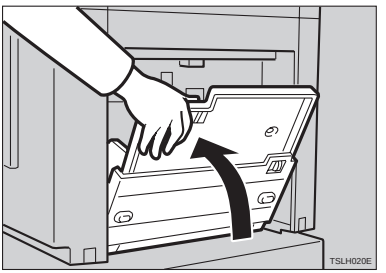
The paper feed tray will move down.

2 **Turn off the main switch.**



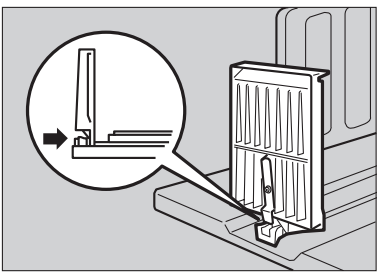
ANT077S

3 **Close the paper feed tray.**



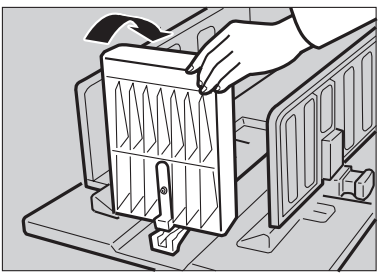
TSLH020E

4 **Move the end plate until the plate handle is flush with the end of the tray.**



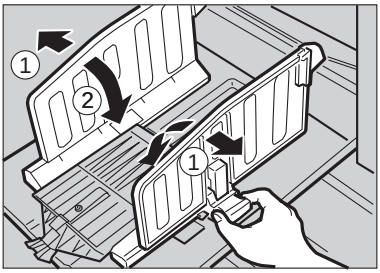
ANT038S

5 **Lower the end plate.**



ANT039S

6 **Move the side plates to the sides, then lower them.**



ANT036S

7 **Close the tray.**

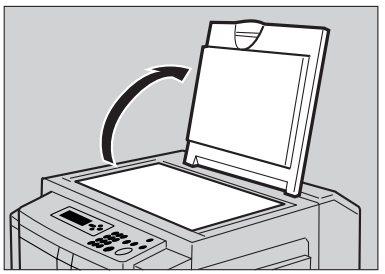
Placing Originals

When using the exposure glass, place the originals face down.

When using the ADF, place the originals face up.

Placing Originals on the Exposure Glass

1 **Lift the exposure glass cover.**

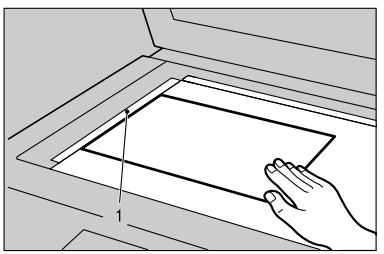


ANT064S

Note

❒ Be sure to lift the exposure glass cover more than 30°.

2 **Place the original face down on the exposure glass. The original should be aligned with the left scale.**



ACY070S

1. **Left scale**

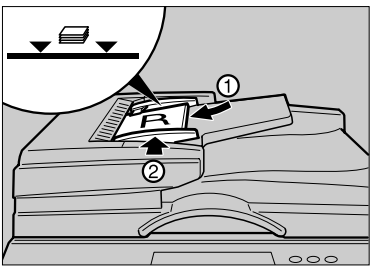
3 **Lower the exposure glass cover.**

4 **Adjust print settings as necessary, and then press the【Start】key.**

Placing Originals in the Auto Document Feeder

1 **Adjust the guide to the original size.**

2 **Insert the aligned originals face up into the ADF.**



AJK153S

Note

❒ To avoid originals misfeeding, fan the originals before placing them in the ADF.

Limitation

❒ Approximately 30 originals (80 g/m^2, 20 lb.) can be inserted at a time in the ADF. The first (top) original will be fed first.

Note

❒ To avoid jamming, fan the originals before placing them in the ADF.

❒ The guides must fit snugly against both sides of the stack.

3 **Adjust print settings as necessary, and then press the 【Start】 key.**

Note

❒ If the next original has been placed in the ADF before the machine stops, that original is fed automatically.

Basic Procedure

When Auto Cycle mode is on, you can process masters and make prints in a single operation.

Note

❒ You can process masters and make prints in a single operation. See p.35 “Auto Cycle”.

❒ If the machine has user codes set, enter your user code using the number keys, and then press the 【OK】 key.

Reference

See p.113 “User Code”.

1 **Make sure no previous settings remain.**

Note

❒ If previous settings remain, press the 【Clear Modes/Energy Saver】 key before entering your settings.

2 **Place the originals.**

Reference

See p.28 “Placing Originals”.

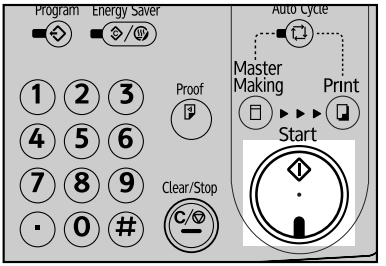
3 **Make sure the 【Master Making】 mode select key is lit.**

Note

❒ If it is not lit, press the 【Master Making】 mode select key.

4 **Make the necessary settings.**

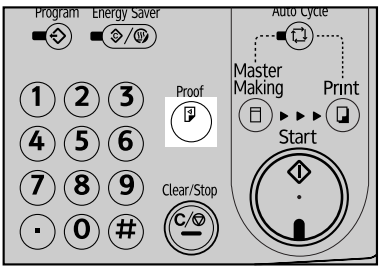
5 **Press the 【Start】 key.**



Master making starts.

Note

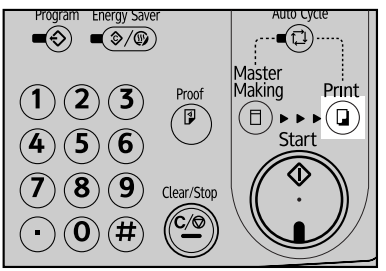
❒ Press the 【Proof】 key to check the image before making prints.



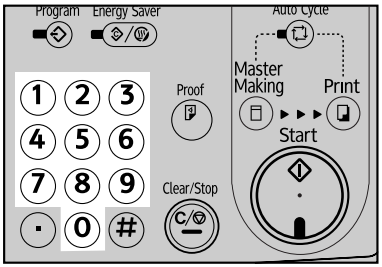
Reference

To change the image position, see p.37 “Adjusting the Print Image Position”.

6 **Make sure the 【Print】 mode select key is lit.**



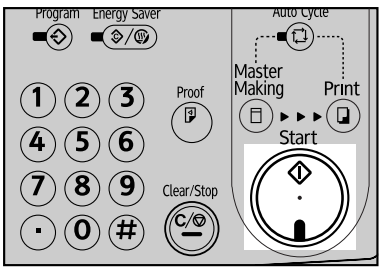
7 **Enter the required number of prints using the number keys.**



Note

❒ Set a print quantity between 1 (minimum) and 9999 (maximum).

8 **Press the【Start】key.**



Note

❒ When the print job finishes, press the **【Clear Modes/Energy Saver】** key. Previously entered job settings are cleared.

How to operate

❖ **To stop the machine during a multi-print run**
Press the **【Clear/Stop】** key.

❖ **To return the machine to the initial condition after printing**
Press the **【Clear Modes/Energy Saver】** key.

❖ **When clearing entered values**
Press the **【Clear/Stop】** key.

Energy Saver Mode

If the machine has not been operated for a certain period of time after printing, or when you press and hold the 【Clear Modes/Energy Saver】 key for 3 seconds, the panel display goes off and the machine enters Energy Saver mode. In Energy Saver mode, the machine consumes less electricity. Press the 【Clear Modes/Energy Saver】 key again, and the machine will return to the ready condition.

Note

❒ By default, the time taken for the machine to shift to Energy Saver mode is 3 minutes.

❒ You can change the waiting time within a range of 1 to 120 minutes. See "Energy Saver Timer" on p.106 "2 System".

❒ In the following cases, the machine will not shift automatically to Energy Saver mode.

- If there is no ink
- If originals or paper are jammed
- If the machine has not finished making masters or prints
- If the machine is printing the second page of a Combine print
- If there is no master
- If the master eject box is full
- If there is an original in the optional Auto Document Feeder
- If the "cover open" indicator is lit
- If you are in the process of making changes to the user tools
- If the screen for entering a user code is displayed

Auto Reset

This machine can be set to return automatically to its initial condition if it has not been operated for a certain period of time. This is called "Auto Reset".

Note

❒ The Auto Reset time can be set from 1 to 5 minutes, or to "Off". See "Auto Reset Timer" on p.106 "2 System".

❒ The default for Auto Reset is Off.

❒ In the following cases, Auto Reset will not take place.

- If there is no ink
- If originals or paper are jammed
- If the machine has not finished making masters or prints
- If the machine is printing the second page of a Combine print
- If there is no paper
- If there is no master
- If the master eject box is full
- If there is an original in the optional Auto Document Feeder
- If the "cover open" indicator is lit
- If you are in the process of making changes to the user tools
- If you have set Auto Reset to "Off"

Printing on Thick or Thin Paper

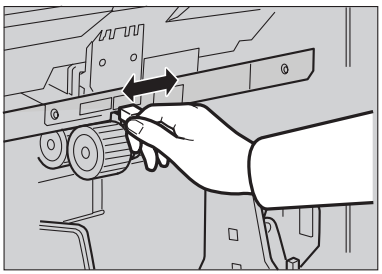
When you make prints on thick (127.9 to 209.3 g/m^2, 34.0 to 55.6 lb.), standard (52.3 to 127.9 g/m^2, 13.9 to 34.0 lb.) or thin (47.1 to 52.3 g/m^2, 12.5 to 13.9 lb.) paper, perform the following steps.

Note

❒ Reduce the print speed when printing on thick or thin paper.

Feed Roller Pressure Lever Position

1 Shift the feed roller pressure lever to the Thick, Standard, or Thin paper position.



ANT075S

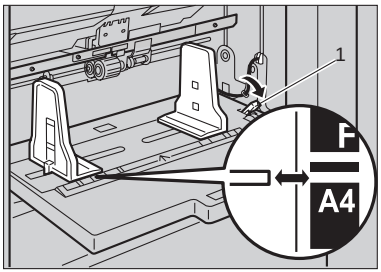
Note

❒ Shift the lever according to the paper weights as shown in the following table.

	Metric version	Inch version
Thick	127.9–209.3 g/m^2	34.0–55.6 lb.
Standard	52.3–127.9 g/m^2	13.9–34.0 lb.
Thin *1	47.1–52.3 g/m^2	12.5–13.9 lb.

*1 When paper is smaller than B5, 5 1/2" × 8 1/2" and heavier than 81.4 g/m^2 (21.6 lb.), move the feed roller pressure lever to the Thin paper position.

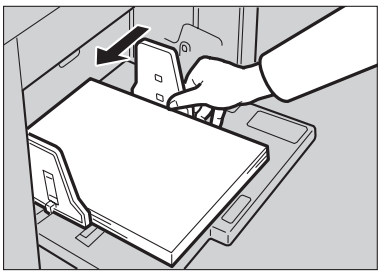
2 Shift the paper feed side plates lock lever forward. Adjust the side plates to match the paper size.



ANT072S

1: Paper Feed Side Plates Lock Lever

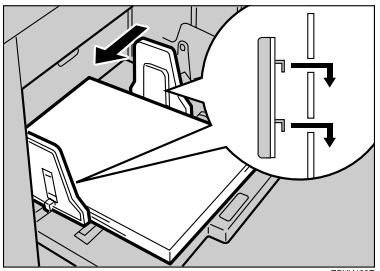
3 Make sure that the paper feed side plates touch the paper lightly.



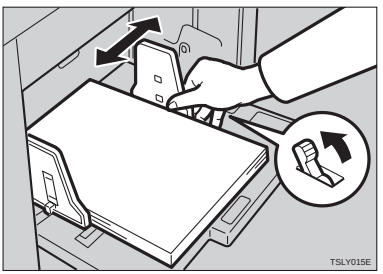
ZCTH150E

When printing onto thin paper

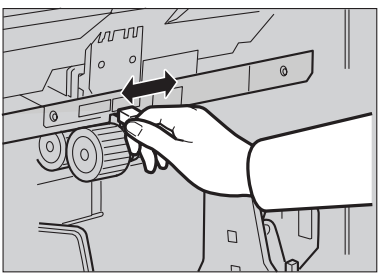
❶ **Set the side pads to both sides of the paper feed side plates. Make sure that the paper feed side plates touch the paper lightly.**



4 **Shift the lock lever to its original position.**

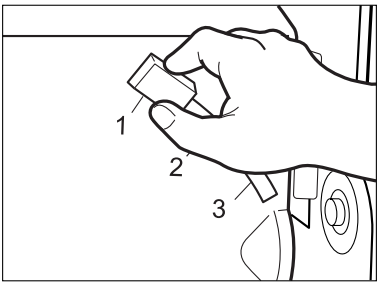


5 **When you finish printing, shift the feed roller pressure lever to the Standard paper position.**



Separation Pressure Lever Position

1 **To prevent double feed, adjust the paper separation pressure using the separation pressure lever.**



Note

❒ Paper separation pressure can be adjusted according to the paper weights as shown in the following table.

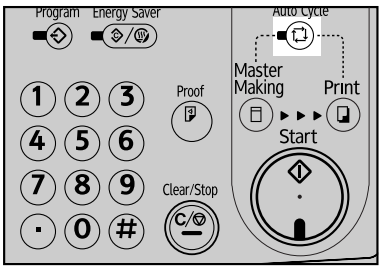
Position	Metric version	Inch version
1	Use this position if the leading edge of the paper is curled, or when the paper does not feed properly at Position 2.	
2 *1	81.6–209.4 g/m^2	21.7–55.6 lb.
3	47.1–81.5 g/m^2	12.6–21.6 lb.

*1 This position can also be used if the leading edge of the paper is curled, or when the paper does not feed properly.

Auto Cycle

Using the default settings, you can process masters and make prints in a single operation. This is called "Auto Cycle".

1 **Make sure the 【Auto Cycle】 key is lit.**



Note

❒ If it is not lit, press the 【Auto Cycle】 key.

2 **Place your originals.**

Reference

See p.28 “Placing Originals”.

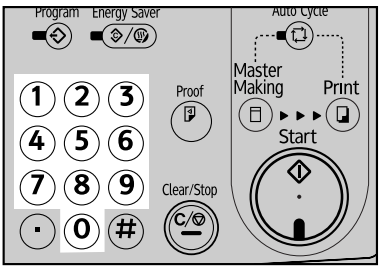
3 **Make sure the 【Master Making】 mode select key is lit.**

Note

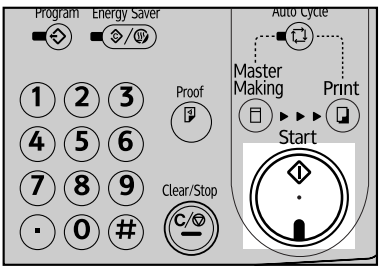
❒ If it is not lit, press the 【Master Making】 mode select key.

4 **Make the necessary settings.**

5 **Enter the required number of prints using the number keys.**



6 **Press the 【Start】 key.**



Note

❒ When the print job finishes, press the 【Clear Modes/Energy Saver】 key. Previously entered job settings are cleared.

Original Type

Select one of the following four types to match your originals:

❖ **Text**
Specify this if the original document consists primarily of text.

❖ **Text/Photo**
If the original document contains a combination of text and photographs, it is printed using the optimum image balance.

❖ **Photo**
Specify this for photographs, pictures, or colored documents.

❖ **Pale**
When printing pale colors, the master is created using pale color print.

❖ **Pencil**
Specify this for originals drawn / written in pencil.

Note

❒ You can specify the original type that is selected by default when the power is turned on. See "Original Type" on p.108 "4 Initial Settings".

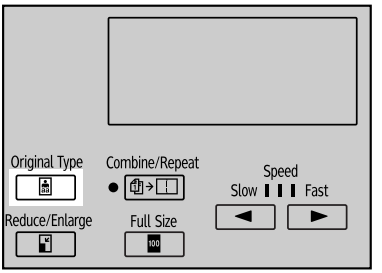
❒ The default is Text mode.

❒ Moire patterns may occur when you are printing from screened originals.

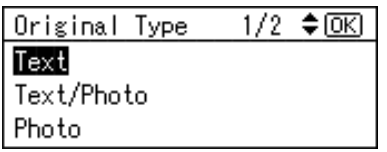
❒ When using Photo mode to print originals with both text and photographs, the text might appear faint. To avoid this, use Text/Photo mode instead.

❒ When using Pencil mode, set documents drawn / written in pencil on the exposure glass.

1 **Press the【Original Type】key.**



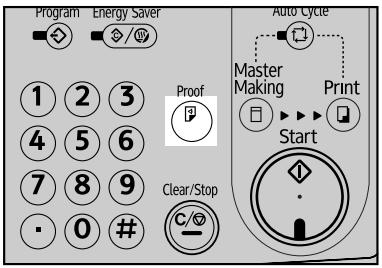
2 **Use the【▲】【▼】keys to select the type of original, and then press the【OK】key.**



Sample Print and Adjustment

Once the master making has been completed, it is possible to confirm the print finish before pressing the 【Print】 mode select key to start the printing process.

1 **Press the 【Proof】 key.**



A single printed page is ejected.

Note

❒ Press the key continuously to eject printed pages in succession.

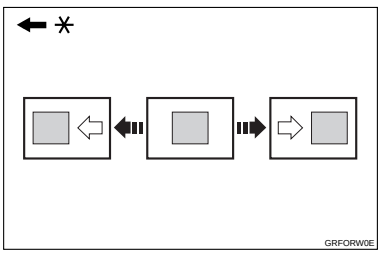
Adjusting the Print Image Position

After master making, you can adjust the print image position to suit your needs. There are two ways:

❖ **Shifting the Image Position Forward or Backward**
Shift the image position using the 【Image Position】 keys.

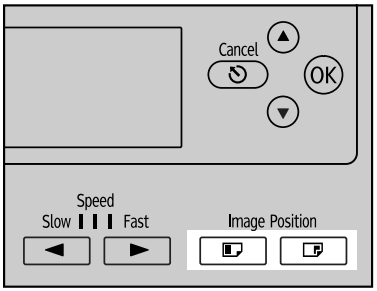
❖ **Shifting the Image Position to the Right or Left**
Shift the image position using the side tray fine adjusting dial.

Shifting the Image Position Forward or Backward



* Paper feed direction

1 **Press the left 【Image Position】 key to move the image forwards, the right key to move it backwards.**

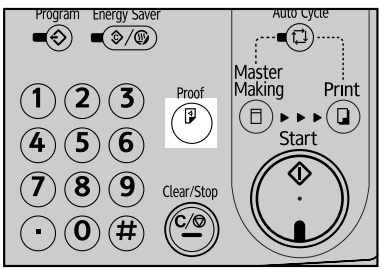


ANT137S

Note

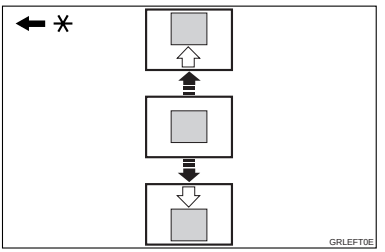
- ❒ When you shift the image forwards, leave a margin (more than 5 mm, 0.2") at the leading edge. If there is no margin, paper might wrap around the drum and cause a misfeed.
- ❒ The right or left 【Image Position】 keys shift the image about 0.5 mm, 0.02" each time they are pressed.
- ❒ The value of the image position that shifted is displayed on the panel display.
- ❒ In A3 Paper Feed mode, the images are fixed at -10 mm, -0.4".

2 **Press the 【Proof】 key to check the image position.**



ANT123S

Shifting the Image Position to the Right or Left



GRLEFT0E

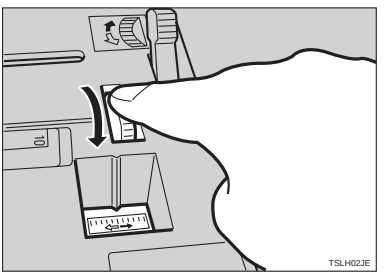
* Paper feed direction

1 **Turn the side tray fine adjusting dial as shown in the illustrations.**

❖ **Shifting the image to the right**

TSLH02IE

❖ **Shifting the image to the left**



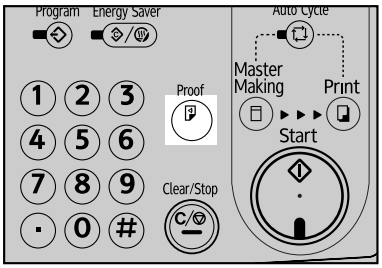
TSLH02JE

Note

- ❒ The image position can be shifted up to about 10 mm, 0.4" each way. Each division on the scale is 2 mm, 0.08".
- ❒ In A3 Paper Feed Mode, adjust the print position to within ±1 mm, ±0.04" of the center.

2 **Adjust the paper delivery side plates to the print paper position.**

3 **Press the 【Proof】 key to check the image position.**



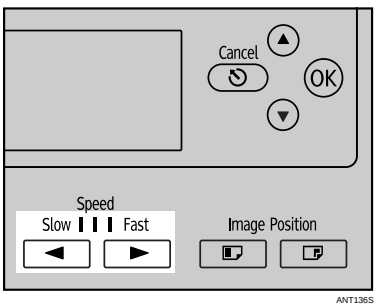
Changing the Printing Speed

Use the [◄] or [►] key to adjust the speed of the machine with the image density and printing paper.

Adjust the print speed using the Speed Keys for the following instances:

- When the paper type is changed:
  - Reduce the print speed when printing on thick or thin paper.
- When you want to change the print density:
  - Increase the print speed to lighten the print density.
  - Reduce the print speed to darken the print density.

1 Press the [►] key to increase the speed and press the [◄] key to reduce the speed.



Note

❒ The following speeds are available:
  - Setting 1:
    80 sheets/minute
  - Setting 2:
    100 sheets/minute
  - Setting 3:
    130 sheets/minute

❒ As a default setting, setting 2 is selected.

❒ In A3 Paper Feed mode, the print speed is fixed at setting 1.

Printing Functions

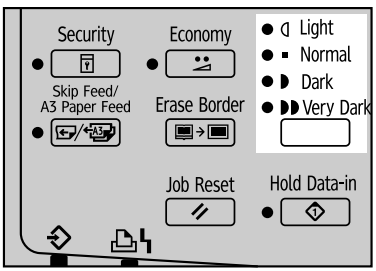
Master Making Density

You can adjust the image density to suit your needs.

Note

❒ You can specify the image density that is selected by default when the power is turned on. See "Master Making Density" on p.108 "4 Initial Settings".

1 **Press the 【Master Making Density】 key to select the density you want to set.**



Note

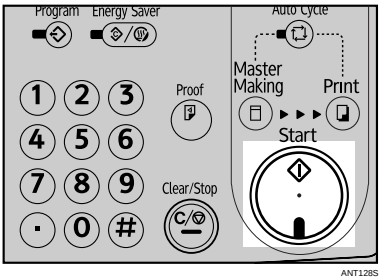
❒ If your original has a colored background such as red or blue, select a lighter image density to prevent the prints from appearing dirty.

2 **Make sure the 【Master Making】 mode select key is lit.**

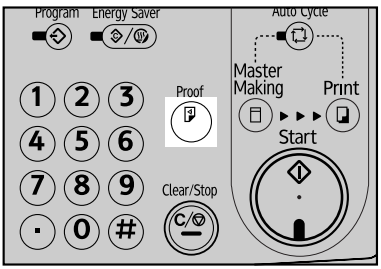
Note

❒ If it is not lit, press the 【Master Making】 mode select key.

3 **Press the 【Start】 key.**



4 **Press the 【Proof】 key to check the print image density.**

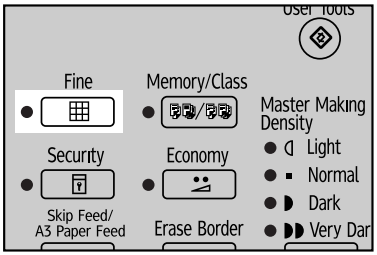


Fine Mode

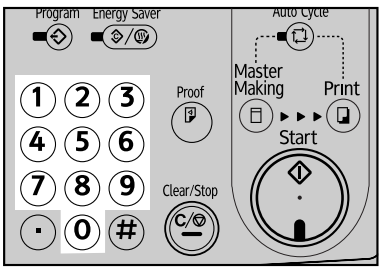
Use the 【Fine】 key to make clear prints.

1 Set your originals.

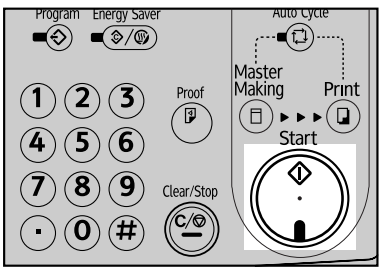
2 Press the 【Fine】 key to select Fine mode.



3 Enter the number of prints with the number keys.

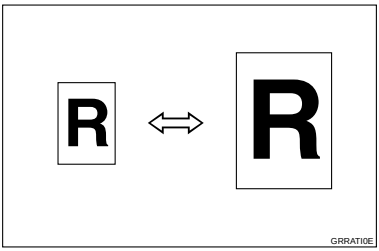


4 Press the 【Start】 key.



Preset Reduce/Enlarge

Use this function to reduce or enlarge originals by a preset ratio.



Note

❒ You can select a ratio regardless of the size of the original or the printing paper. However, with some ratios, parts of the image might not be printed or margins will appear on prints.

❒ You can choose from 7 preset ratios (3 enlargement ratios and 4 reduction ratios).

❖ **Metric version**

Ratio (%)	Original → Print paper size
141	A5 → A4, B5 JIS → B4 JIS
122	A4 → B4 JIS, A5 → B5 JIS
115	B5 JIS → A4
93	—
87	A3 → B4 JIS, A4 → B5 JIS
82	B4 JIS → A4, B5 JIS → A5
71	A3 → A4, A4 → A5, B4 JIS → B5 JIS

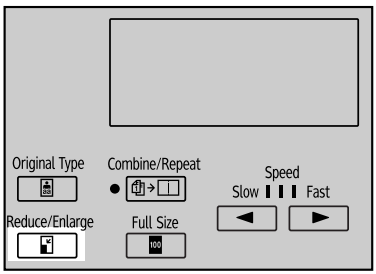
❖ **Inch version**

Ratio (%)	Original → Print paper size
155	5 1/2" × 8 1/2" → 8 1/2" × 14"
129	5 1/2" × 8 1/2" → 8 1/2" × 11"
121	8 1/2" × 14" → 11" × 17"
93	—
77	8 1/2" × 14" → 8 1/2" × 11"
74	11" × 15" → 8 1/2" × 11"
65	11" × 17" → 8 1/2" × 11", 8 1/2" × 11" → 5 1/2" × 8 1/2"

❒ You can specify the reproduction ratio that is selected by default when the power is turned on. See "Ratio" on p.108 "4 Initial Settings".

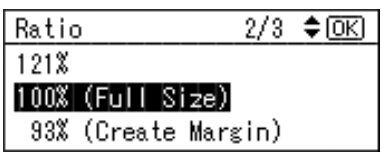
1 **Set your original.**

2 **Press the【Reduce/Enlarge】key.**

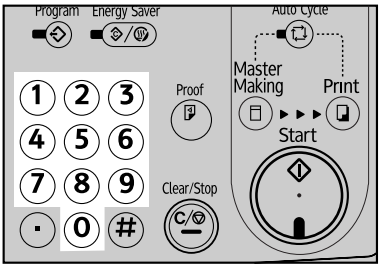


ANT131S

3 **Use the【▲】【▼】keys to select your desired reproduction ratio, and then press the【OK】key.**

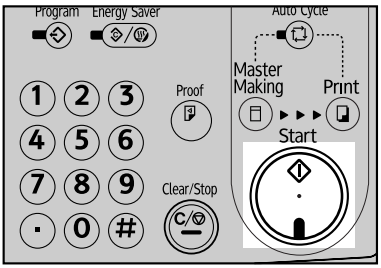


4 **Enter the number of prints with the number keys.**



ANT122S

5 **Press the【Start】key.**

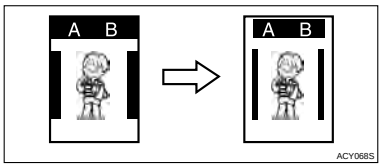


ANT128S

3

Erase Border

This function erases all four margins of the original or paper.



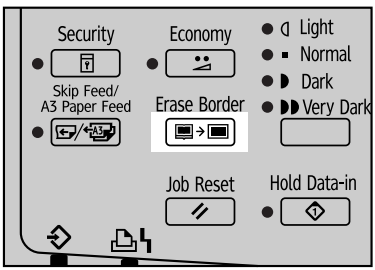
Note

❒ You can specify within a range of 0 to 20mm, 0" to 0.8", the width of the margin to be erased. See "Erase Border Width" on p.108 "4 Initial Settings".

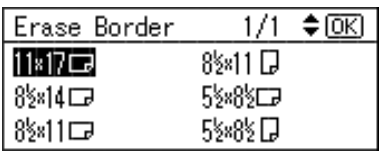
❒ The default is 5 mm, 0.2".

1 **Set your original.**

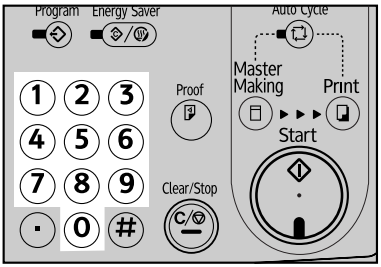
2 **Press the【Erase Border】key.**



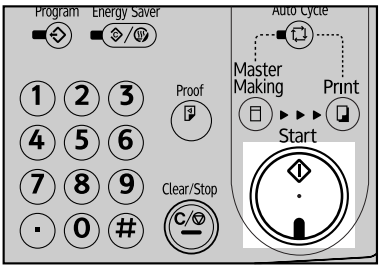
3 **Use the【▲】【▼】keys to select the original size and orientation, and then press the【OK】key.**



4 **Enter the number of prints with the number keys.**



5 **Press the【Start】key.**



Auto Delete Margin Shadow

If the exposure glass or ADF is open during scanning, and Erase Border is not selected, dark areas surrounding the original might appear as a shadow on the prints.

The Auto Delete Margin Shadow function automatically detects there areas and prevents them appearing on the prints.

Economy Mode

Use this function to save ink.

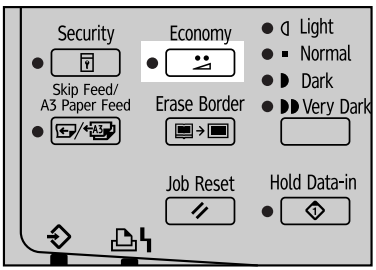
Note

❒ Prints will appear lighter when Economy mode is used.

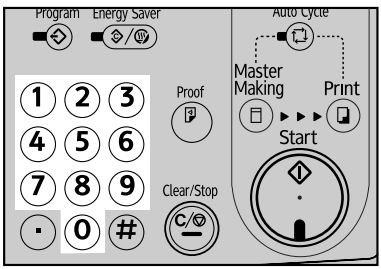
❒ The default is Off. To select either "On" or "Off" for Economy mode, see "Economy Mode" on p.108 "4 Initial Settings".

1 **Set your original.**

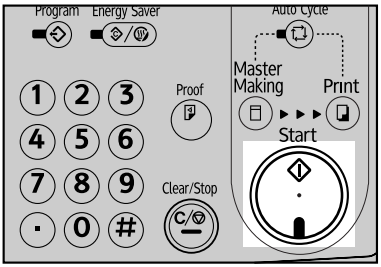
2 **Press the【Economy Mode】key.**



3 **Enter the number of prints with the number keys.**



4 **Press the【Start】key.**



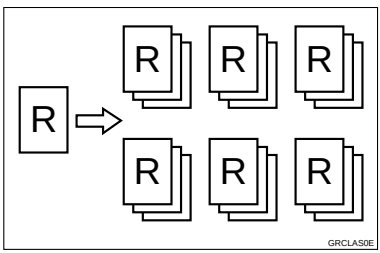
Memory/Class

The Memory/Class function is useful especially for people such as teachers, who often have to make different numbers of prints from the same original for different classes or have to make the same number of prints from a number of different originals for the same class.

Under the Memory/Class function, the following modes are available:

❖ **Class Mode (print per class)**

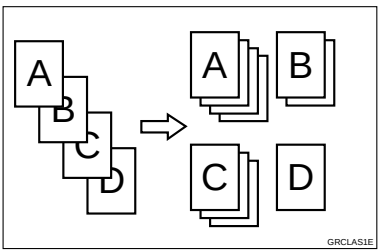
Use to make prints from one original for multiple classes, with the same number of prints for each class.



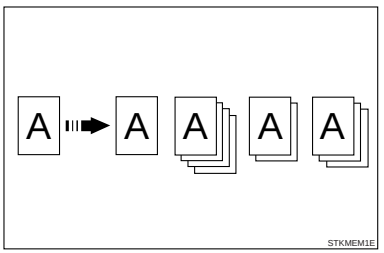
❖ Memory Mode (print per original)

You can choose from the following two types of Memory mode:

- Normal Memory Mode
  Use to make prints from a number of different originals. A different number of prints is made from each original.



- Stack Memory Mode
  Use to make prints from one original, with a different number of prints for each class.



Note

❒ You can specify either Normal Memory Mode or Stack Memory Mode as the default. See "Memory Mode Setting" on p.109 "5 Mode Settings".

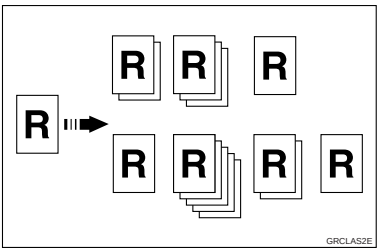
❖ Recall Program

Use to recall settings that you have stored under the Memory Mode and Class Mode.

❖ Class/Year Mode

Reference

If the use of this machine is not limited to school or college, you can choose to have this mode displayed as "Department" displayed instead of "Class/Year". See "Class Display" on p.107 "3 Set Operation Mode".



- All
  Use to make prints from the same original for all the registered classes in all the school years.
- Class
  Select to make prints from the same original for only the classes selected.
- Households
  Use to make prints from the same original for all the registered student households in the school.

Class Mode (print per class)

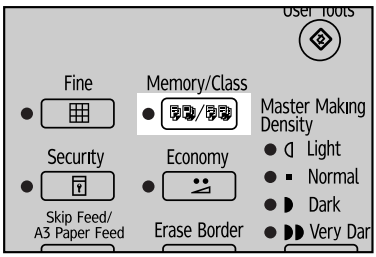
Note

❒ You can print for up to 24 combinations of number of prints and number of classes.

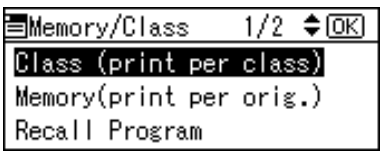
❒ The maximum possible number of classes in one combination is 99.

1 **Set your original.**

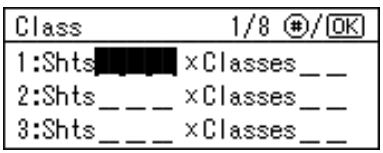
2 **Press the【Memory/Class】key.**



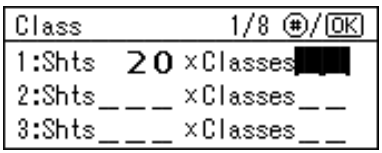
3 **Use the【▲】【▼】keys to select Class and then press【OK】key.**



4 **With the number keys, enter the desired number of prints, and the press the【#】key.**



5 **With the number keys, enter the desired number of classes, and then press the【#】key.**

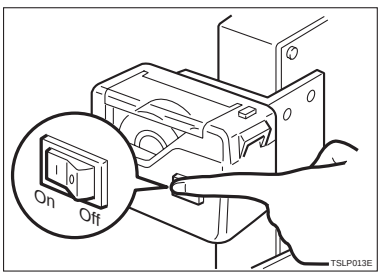


Note

❒ Repeat Steps **4** to **5** as desired.

6 **Press the【OK】key.**

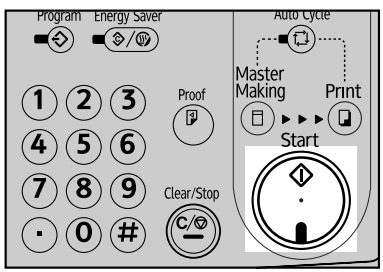
7 **If you are using the optional tape dispenser, turn on the tape dispenser switch.**



Note

❒ The optional tape dispenser automatically feeds out strips of paper to separate each group of prints.

8 **Press the【Start】key.**



Memory Mode (print per original)

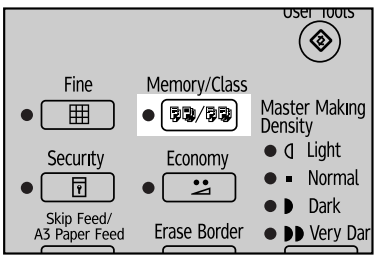
Normal Memory Mode

Note

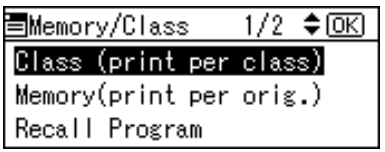
❒ You can make prints from up to 30 originals at one time.

1 **Set your original.**

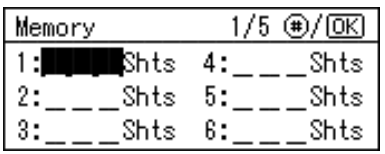
2 **Press the【Memory/Class】key.**



3 **Use the【▲】【▼】keys to select Memory, and then press the【OK】key.**



4 **With the number keys, enter the desired number of prints for each original, and then press the【#】key.**

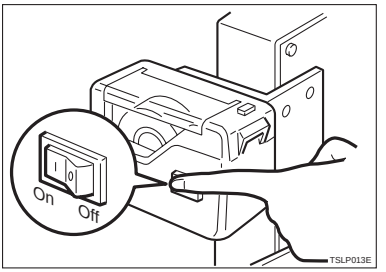


Note

❒ Repeat this step until you have entered for all the originals.

5 **Press the【OK】key.**

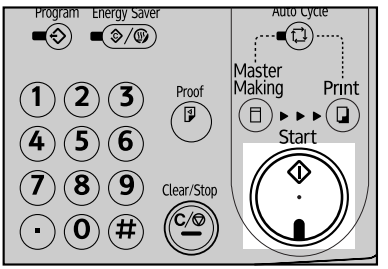
6 **If you are using the optional tape dispenser, turn on the tape dispenser switch.**



Note

❒ The optional tape dispenser automatically feeds out strips of paper to separate the prints made from each original.

7 **Press the【Start】key.**



Stack Memory Mode

Limitation

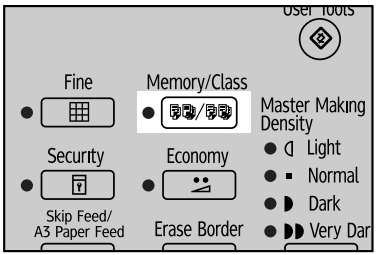
❒ To use Stack Memory mode, you need to first set Memory Mode to "Stack Mode" using the user tools. See "Memory Mode Setting" on p.109 "5 Mode Settings".

Note

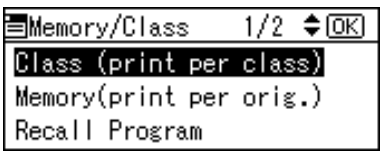
❒ You can make prints for up to 30 classes at one time.

1 **Set your original.**

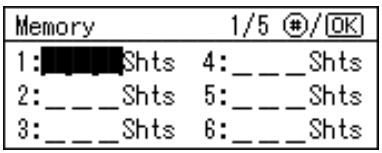
2 **Press the【Memory/Class】key.**



3 **Use the【▲】【▼】keys to select Memory, and then press the【OK】key.**



4 **With the number keys, enter the desired number of prints for each class, and then press the【#】key.**



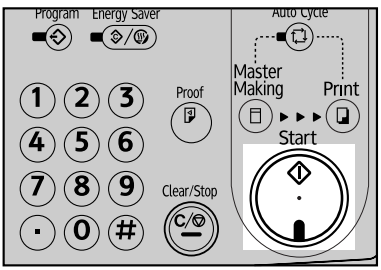
Note

❒ Repeat this step until you have entered for all of your classes.

5 **Press the【OK】key.**

6 **If you are using the optional tape dispenser, turn on the tape dispenser switch.**

7 **Press the【Start】key.**



Recall Program

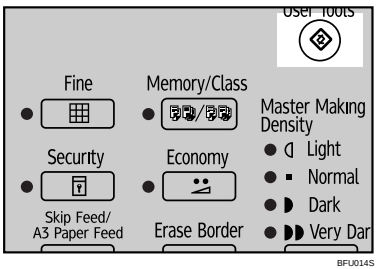
Note

❒ You can store up to 10 entries for Memory mode with each entry containing settings for up to 30 originals (Normal Memory mode), or settings for up to 30 classes (Stack Memory mode).

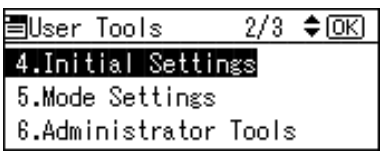
❒ You can store up to 10 entries for Class mode with each entry containing settings for up to 24 combinations of classes and numbers of prints.

Storing Normal Memory Mode Settings

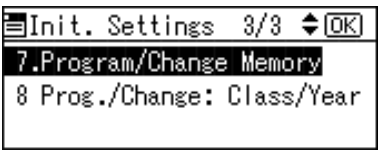
1 **Press the【User Tools】key.**



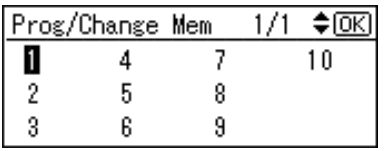
2 **Use the【▲】【▼】keys to select 4 Initial Settings, and then press the【OK】key.**



3 **Use the【▲】【▼】keys to select 7 Program/Change Memory, and then press the【OK】key.**



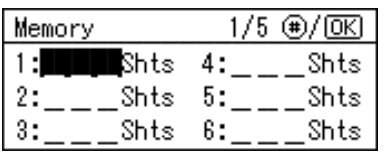
4 **Use the【▲】【▼】keys to select a number, and then press the【OK】key.**



Note

❒ If the number is already in use, a message will be displayed asking if you wish to overwrite the settings stored. To overwrite, press the【OK】key. Otherwise press the【Cancel】key to return to the previous display, and then select another number.

5 **With the number keys, enter the number of prints for each original, and then press the【#】key.**



Note

❒ Repeat Steps **4** and **5** to register all of your originals.

6 **Press the【OK】key.**

7 **Press the【Clear Modes/Energy Saver】key.**

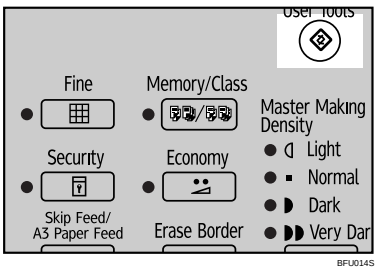
The contents that you have stored are now effective.

Storing Stack Memory Mode Settings

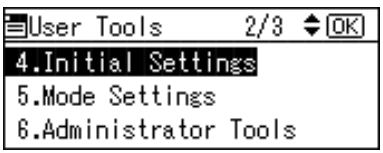
Limitation

❒ To use Stack Memory mode, you need to first set Memory Mode to "Stack" using the user tools. See "Memory Mode Setting" on p.109 "5 Mode Settings".

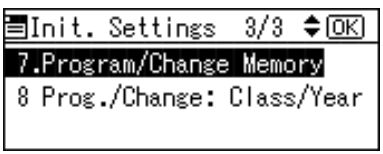
1 **Press the【User Tools】key.**



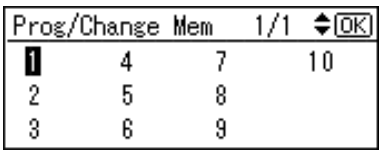
2 **Use the【▲】【▼】keys to select 4 Initial Settings, and then press the【OK】key.**



3 **Use the【▲】【▼】keys to select 7 Program/Change memory, and then press the【OK】key.**



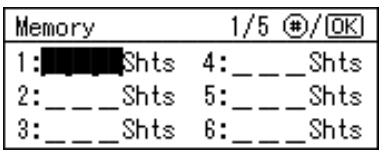
4 **Use the【▲】【▼】keys to select a number, and then press the【OK】key.**



Note

❒ If the number is already in use, a message will be displayed asking if you wish to overwrite the settings stored. To overwrite, press the【OK】key. Otherwise press the【Cancel】key to return to the previous display, and then select another number.

5 **With the number keys, enter the number of prints for each class, and then press the【#】key.**



Note

❒ Repeat Steps **4** and **5** to register all of your classes.

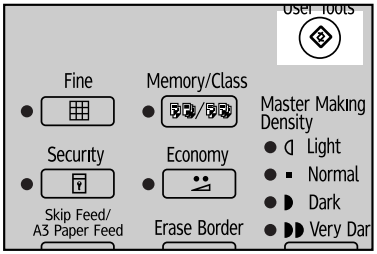
6 **Press the【OK】key.**

7 **Press the【Clear Modes/Energy Saver】key.**

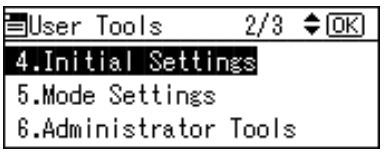
The contents that you have stored are now effective.

Storing Class Mode Settings

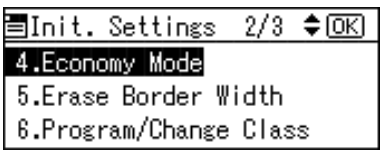
1 **Press the【User Tools】key.**



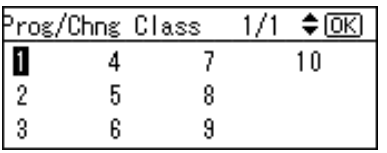
2 **Use the【▲】【▼】keys to select 4 Initial Settings, and then press the【OK】key.**



3 **Use the【▲】【▼】keys to select 6 Program/Change Class, and then press the【OK】key.**



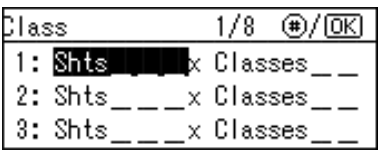
4 **Use the【▲】【▼】keys to select a number, and then press the【OK】key.**



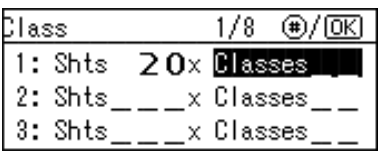
Note

❒ If the number is already in use, a message will be displayed asking if you wish to overwrite the settings stored. To overwrite, press the【OK】key. Otherwise press the【Cancel】key to return to the previous display, and then select another number.

5 **With the number keys, enter the number of prints, and then press the【#】key.**



6 **With the number keys, enter the number of classes, and then press the【#】key.**



Note

❒ Repeat Steps **4** to **6** to register all of your classes.

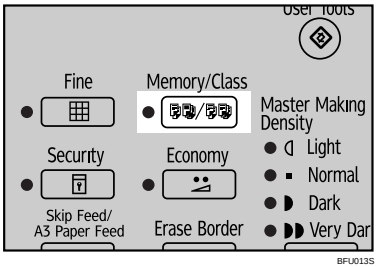
7 **Press the【OK】key.**

8 **Press the【Clear Modes/Energy Saver】key.**

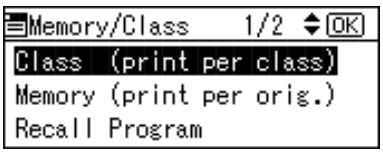
The contents that you have stored are now effective.

Recalling the Stored Settings

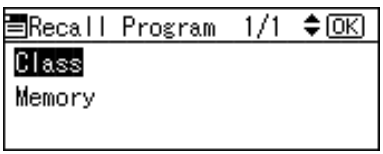
1. **Set your original.**
2. **Press the 【Memory/Class】 key.**



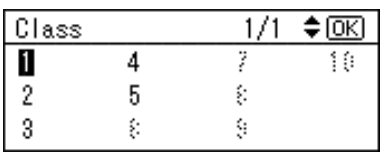
3. **Use the 【▲】【▼】 keys to select Recall Program, and then press the 【OK】 key.**



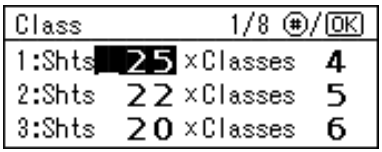
4. **Use the 【▲】【▼】 keys to select Class or Memory, and then press the 【OK】 key.**



5. **Use the 【▲】【▼】 keys to select the number to recall, and then press the 【OK】 key.**



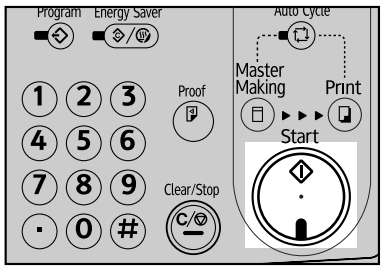
6. **Confirm that the settings are correct, and then press the 【OK】 key.**



Note

❒ To change the stored settings, use the 【▲】【▼】 keys to select the item that you wish to change, and then overwrite using the number keys.

7. **Press the 【Start】 key.**



Class/Year

Preparation

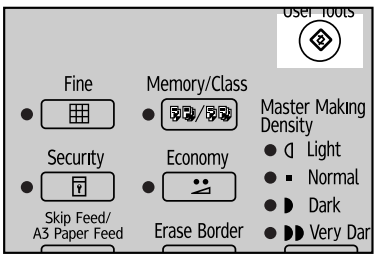
To use this mode, you need to first register the number of prints required for each class.

Registering Class/Year

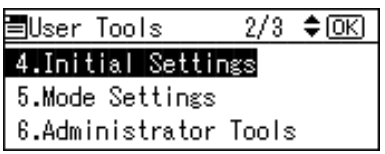
Note

❒ You can register for up to 108 classes (up to 12 classes per school year for a maximum of 9 school years).

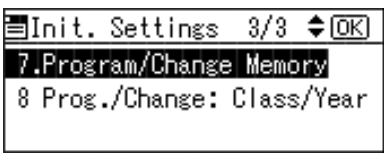
1 **Press the [User Tools] key.**



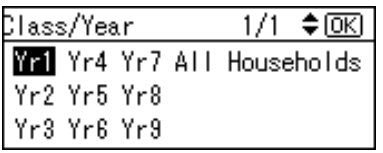
2 **Use the [▲][▼] keys to select 4 Initial Settings, and then press the [OK] key.**



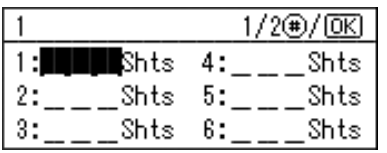
3 **Use the [▲][▼] keys to select 8 Prog./Change:Class/Year, and then press the [OK] key.**



4 **Use the [▲][▼] keys to select the desired school year, and then press the [OK] key.**



5 **With the number keys, enter the number of prints for a class, and then press the [#] key.**



Note

❒ Repeat Steps **4** and **5** to register all of your classes.

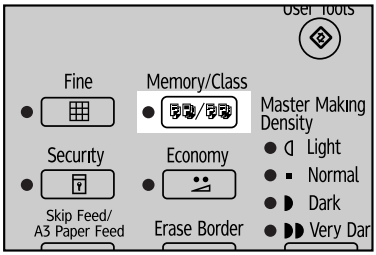
6 **Press the [OK] key.**

7 **Press the [Clear Modes/Energy Saver] key.**

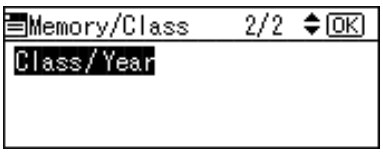
The contents that you have registered are now effective.

Printing for All Years

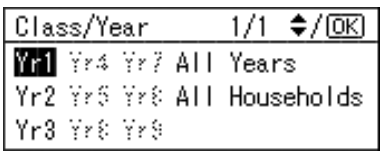
1. Set your original.
2. Press the【Memory/Class】key.



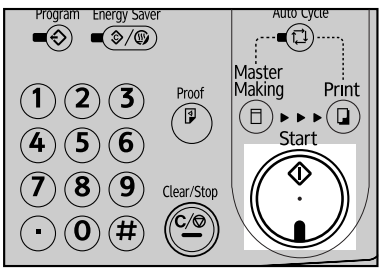
3. Use the【▲】【▼】keys to select Class/Year, and then press the【OK】key.



4. Use the【▲】【▼】keys to select All Years, and then press the【OK】key.

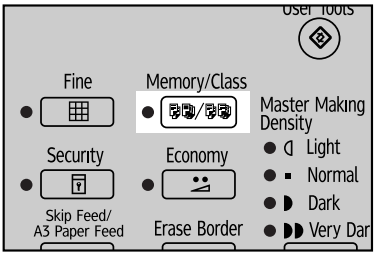


5. Press the【Start】key.

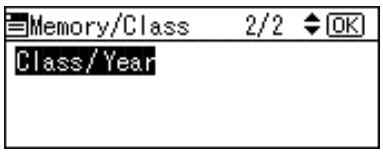


Printing for Selected Classes

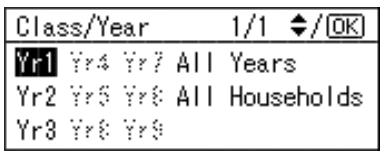
1. Set your original.
2. Press the【Memory/Class】key.



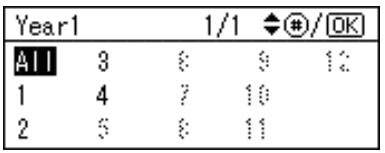
3. Use the【▲】【▼】keys to select Class/Year, and then press the【OK】key.



4. Use the【▲】【▼】keys to select the school year, and then press the【OK】key.



5 **Use the [▲][▼] keys to select the class that you wish to print for, and then press the [#] key.**



Note

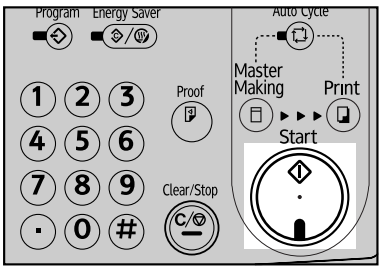
❒ Repeat Step **5** to select more classes.

❒ You can only select classes from the same school year.

❒ If you have selected the wrong class, highlight it again using the [▲][▼] keys, and then press the [#] key to cancel its selection.

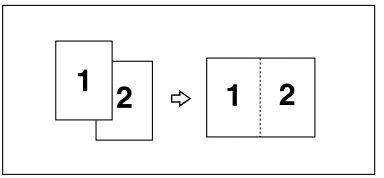
6 **Press the [OK] key.**

7 **Press the [Start] key.**



Combine

Use this function to combine two originals onto one sheet of paper.



Note

❒ When the two originals are combined, their sizes would be reduced or enlarged as follows:

❖ **Metric version**

		Original Size		
		A4	B5	A5
Paper Size	B4	87%	100%	122%
	A4	71%	82%	100%

❖ **Inch version**

		Original Size	
		$8^1/_2$" × 11"	$5^1/_2$" × $8^1/_2$"
Paper Size	$8^1/_2$" × 14"	77%	100%
	$8^1/_2$" × 11"	65%	100%

❒ If the length of the first original is shorter than 91mm, 3.6" , Combine mode will be disabled.

❒ You can set the machine to automatically cancel Combine/Repeat mode once you have finished using it. See "Cancel Combine Setting" on p.109 "5 Mode Settings".

- ❒ Any image closer than 5mm, 0.2" to the leading edge of the first original will not be printed. Also, any image closer than 4mm, 0.16" to the leading edge of the second original will not be printed. When the image is too close to the leading edge, make duplicates of the originals with the image shifted away from the leading edge, and then print from the duplicates.
- ❒ You can select different image settings for the first and second originals.
- ❒ Make sure that the paper feed side plates touch the paper lightly. If they do not, then the two images will not be properly aligned on the prints.

Reference

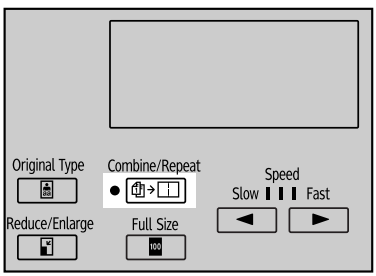
For details on how to use the optional Auto Document Feeder when combining originals, see p.58 “Using the Auto Document Feeder when Combining Originals”.

1 **Place the first original face down on the exposure glass.**

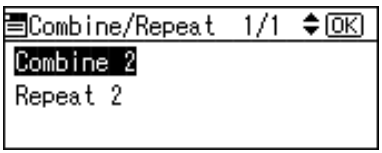
Note

- ❒ When combining originals, place the original face down on the exposure glass with its leading edge towards you, as shown above.

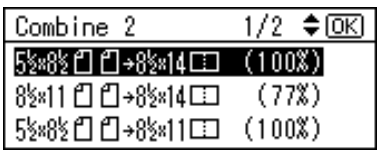
2 **Press the【Combine/Repeat】key.**



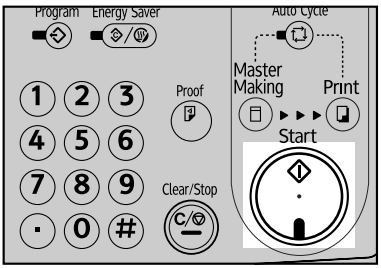
3 **Use the【▲】【▼】keys to select Combine 2, and then press the【OK】key.**



4 **Use the【▲】【▼】keys to select original and paper size, and then press the【OK】key.**

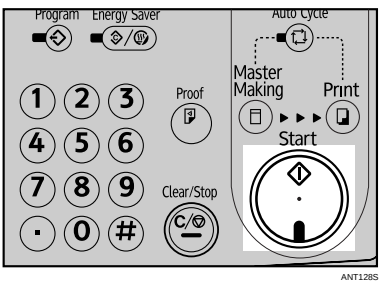


5 **Press the【Start】key.**



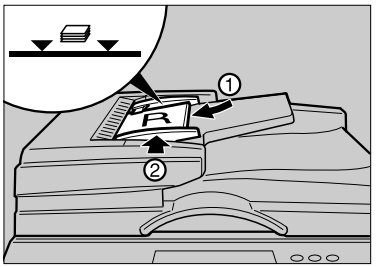
6 **After the first original has been scanned, place the second original in the same way.**

7 **Press the【Start】key.**



Using the Auto Document Feeder when Combining Originals

1 **Place the originals face up in the Auto Document Feeder.**

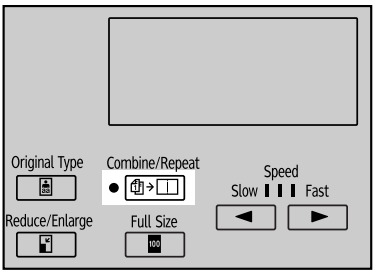


AJK153S

Note

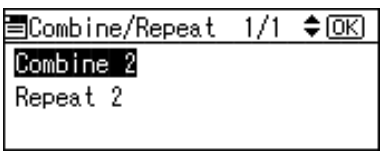
❒ The first (top) original will be printed on the left side of the print.

2 **Press the【Combine/Repeat】key.**

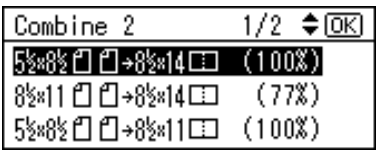


ANT130S

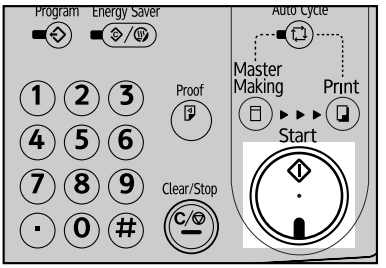
3 **Use the【▲】【▼】keys to select Combine 2, and then press the【OK】key.**



4 **Use the【▲】【▼】keys to select original and paper size, and then press the【OK】key.**



5 **Press the【Start】key.**



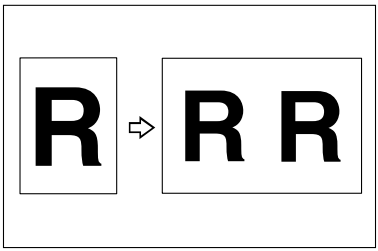
ANT128S

Note

❒ After the first original has been stored, the second original is fed.

Repeat

Use this function to repeat the image twice on the same sheet of paper.



Limitation

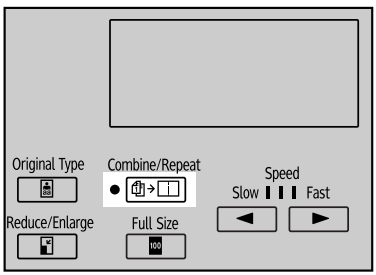
❒ You cannot use the optional Auto Document Feeder with the Repeat function.

Note

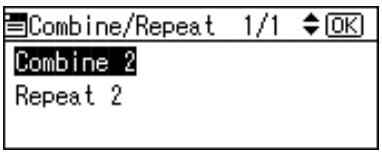
❒ You can choose to have either Combine or Repeat selected by default when the power is turned on. See "Combine/Repeat Priority" on p.109 "5 Mode Settings".

1 **Set your original.**

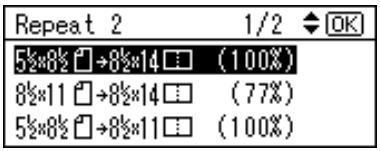
2 **Press the【Combine/Repeat】key.**



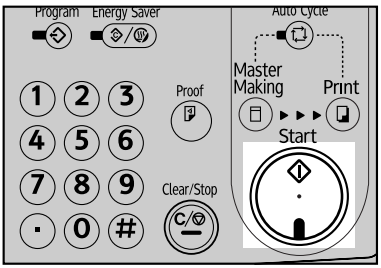
3 **Use the【▲】【▼】keys to select Repeat 2, and then press the【OK】key.**



4 **Use the【▲】【▼】keys to select original and paper size, and then press the【OK】key.**



5 **Press the【Start】key.**



Skip Feed/A3 Paper Feed

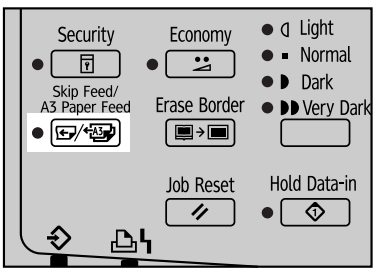
Skip Feed

If the backs of prints are dirty, you can use the Skip Feed function to make the drum rotate twice instead of once with every sheet of paper fed. This gives you time to remove prints one by one from the paper delivery tray, or to insert a sheet of paper between two prints.

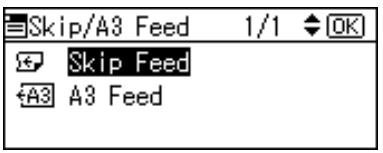
Note

- ❒ You can specify how many times that the drum rotates when the power is turned on. Alternatively, you can also choose whether or not to change the number of rotations temporarily when the 【Skip Feed/A3 Paper Feed】 key is pressed. See "Skip Feed" on p.109 "5 Mode Settings".
- ❒ The number of rotations can be set from 2 to 9.
- ❒ The default is 2.

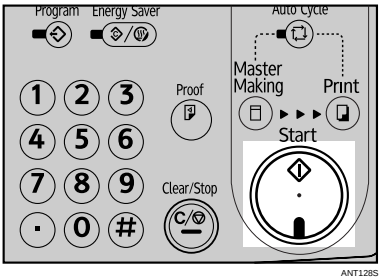
1 **Press the 【Skip Feed/A3 Paper Feed】 key.**



2 **Use the 【▲】【▼】keys to select Skip Feed, and then press the 【OK】 key.**



3 **Press the 【Start】 key.**



A3 Paper Feed

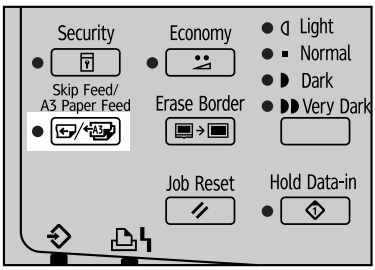
This machine can print on A3 size paper.

Note

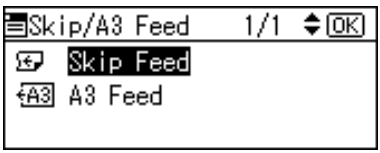
- ❒ Although printing on A3▭ size paper is possible, the maximum possible size of the printed image is 210 × 355 mm. If you print A3▭ size originals on A3▭ paper at 100% magnification, areas of the printed image will be missing.
- ❒ The horizontal (upper and lower) image position are fixed at -10 mm. The vertical (left and right) print margins can each be adjusted by approximately 1 mm.
- ❒ Print speed is limited to 80 cpm.
- ❒ A3 Paper Feed is possible for paper between 52.3 g/m^2, 14 lb. and 157 g/m^2, 42 lb. in weight.
- ❒ The A3▭ output tray can store up to 500 sheets of 64 g/m^2, 17 lb. paper.
- ❒ To load A3▭ size paper, the Side pads and Side plate guides must first be removed.
- ❒ Skip Feed Printing is not possible when printing on A3▭ size paper.
- ❒ A3 Paper Feed cannot be registered to Memory mode.

❒ When the Hold Data-in mode is off, the A3 Paper Feed function cannot be used. When using the A3 Paper Feed function for online printing, set Hold Data-in mode to on after Master Making, and then specify A3 Paper Feed to print.

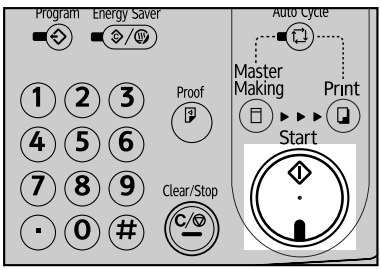
1 **Press the【Skip Feed/A3 Paper Feed】key.**



2 **Use the【▲】【▼】keys to select A3 Paper Feed, and then press the【OK】key.**



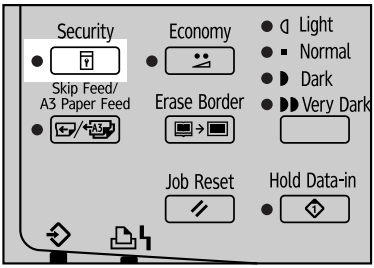
3 **Press the【Start】key.**



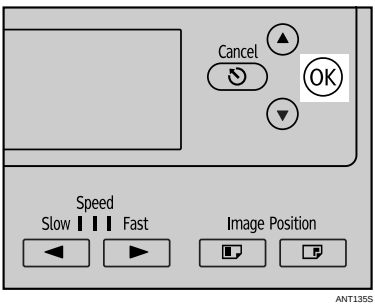
Security Mode

Use this function to prevent others from accessing your masters and making prints of confidential documents after you have done so.

1 **After you have made your prints, press the【Security】key.**



2 **Press the【OK】key.**



Note

❒ Once Security mode is set, you will not be able to press the【Proof】key or the【Start】key, nor will you be able to pull out the drum unit.

❒ Security mode cannot be cleared by turning off the main switch.

❒ Security mode will be canceled when you set a new original and press the【Start】key.

Online Printing

Online printing allows you to use this machine as a PC printer.

Limitation

❒ The optional printer controller is required.

Reference

For details about online printing, refer to the manual for the printer controller.

Hold Data-in

You can select whether or not the machine automatically switches to Online mode when it receives data from a PC.

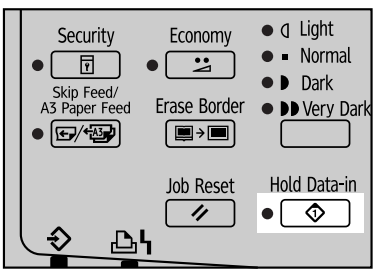
Press the 【Hold Data-in】 key to switch it on or off.

When the Hold Data-in mode is off, the machine gives priority to data received from a PC. If you are making prints and do not wish to have your print job interrupted by a PC, press the 【Hold Data-in】 key to turn it on.

Note

❒ The default is Off.

1 Press the 【Hold Data-in】 key.



Program

Use this function to store up to nine frequently used print job settings and to recall them for future use.

Note

❒ The stored contents will not be cleared even when you turn off the main switch.

❒ The stored contents cannot be deleted. To change the contents of a program, overwrite it with new print settings.

❒ You can store settings for the following functions:
- Type of Original
- Image Density
- Image Position
- Printing Speed
- Fine Mode
- Preset Reduce/Enlarge
- Edge Erase
- Economy Mode
- Memory/Class
- Combine/Repeat
- Skip Feed
- Hold Data-in

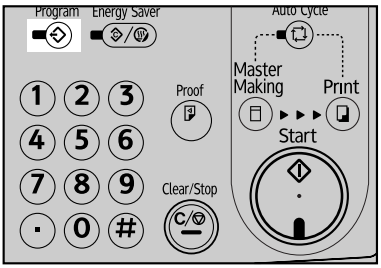
❒ You cannot store settings for A3 Paper Feed function.

❒ You cannot store settings for Security mode, nor for the Program function itself.

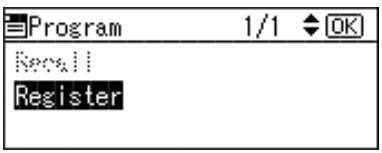
Registering Print Settings

1 **First specify the print settings that you wish to store.**

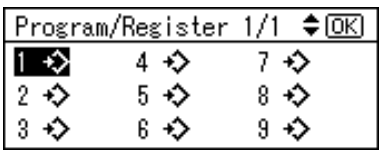
2 **Press the【Program】key.**



3 **Use the【▲】【▼】keys to select Register, and then press the【OK】key.**



4 **Use the【▲】【▼】keys to select a number.**



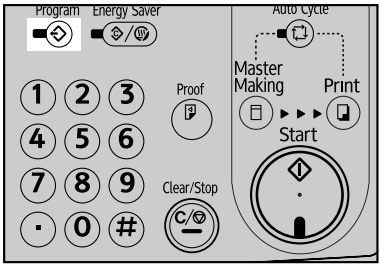
Note

❒ If the number is already in use, a message will be displayed asking whether you wish to overwrite the settings stored. To overwrite, press the【OK】key. Otherwise press the【Cancel】key to return to the previous display, and then select another number.

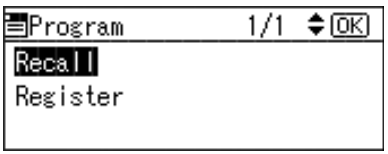
5 **Press the【OK】key.**

Recalling a Program

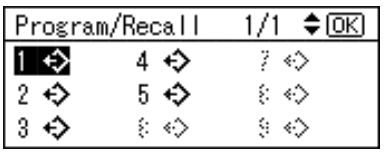
1 **Press the【Program】key.**



2 **Use the【▲】【▼】keys to select Recall, and then press the【OK】key.**



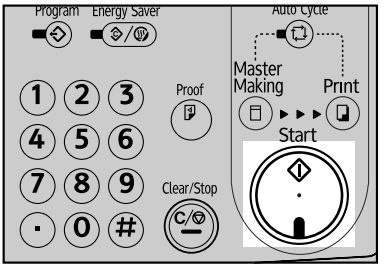
3 **Use the【▲】【▼】keys to select the number to recall, and then press the【OK】key.**



The stored settings are displayed.

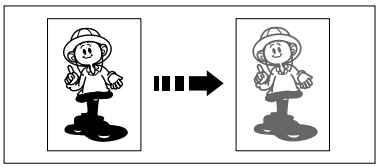
4 **Confirm that the settings are correct, and then set your original.**

5 **Press the【Start】key.**



Make Color Prints

Color drum units (red, blue, green, brown, yellow, purple, navy, maroon, orange and teal) are available as options in addition to the standard black unit. For making color prints, a separate drum unit is necessary for each color.



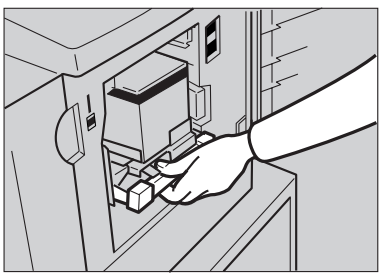
ANT114S

Changing the Color Drum Unit

1 **Open the front cover.**

ANT057S

2 **Pull out the drum unit handle.**

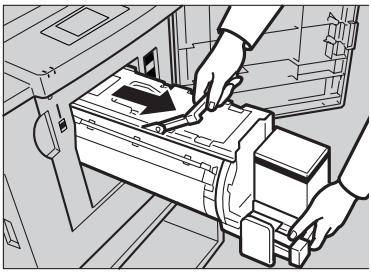


ANT052S

Note

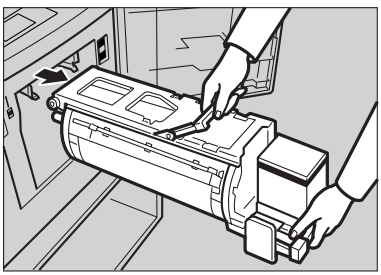
❒ If you cannot pull out the drum unit, push the drum unit handle, then pull out the drum unit.

3 **Hold the rail on the drum and slide out the drum while pulling the release towards you.**



ANT04

4 **Remove the drum unit from the machine while holding the upper drum stay.**

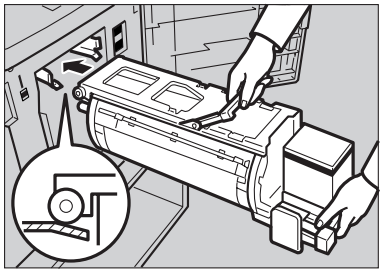


ANT048S

Note

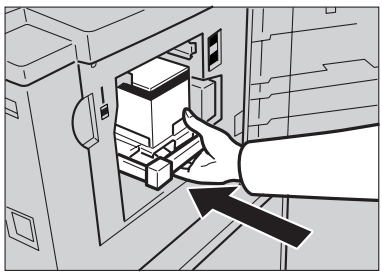
❒ Be careful not to let the drum unit fall.

5 **Insert the color drum unit along the guide rail.**



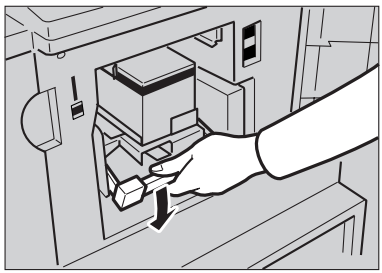
ANT053S

6 **Slide in the drum unit until it locks into position.**



ANT049S

7 **Lower the drum unit lock lever.**



ANT115S

8 **Close the front cover.**

ANT059S

Note

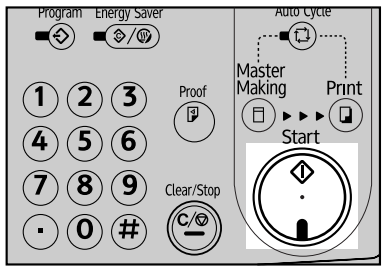
❒ Make sure that the **Cover Open** indicator (📖) turns off, and the **Color** indicator is lit.

Making Color Prints

1 **Make sure that the Color indicator is lit.**

2 **Set your original.**

3 **Press the【Start】key.**



ANT128S

Printing in Two Colors

After printing in one color, you can print in another color on the same side of the print.

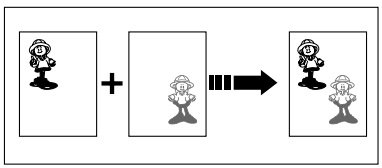
Important

- ❒ Leave the prints for a while before printing on them again to let the ink dry.
- ❒ If the prints are not dry, the paper feed roller might become dirty. In this case, wipe off the roller with a cloth.

Note

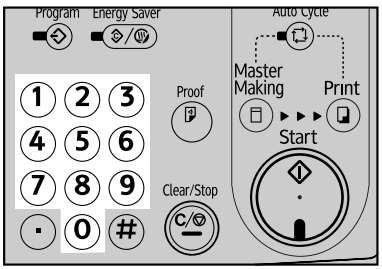
- ❒ You cannot print in two colors at a time.

1 **Prepare two originals. Set the first original on the exposure glass.**



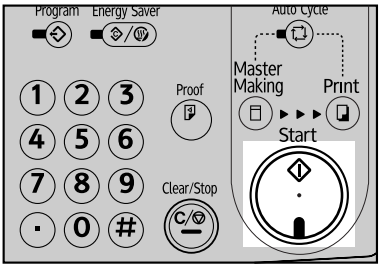
ANT113S

2 **Enter the number of prints with the number keys.**



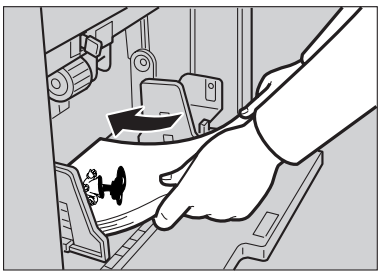
ANT122S

3 **Press the【Start】key.**



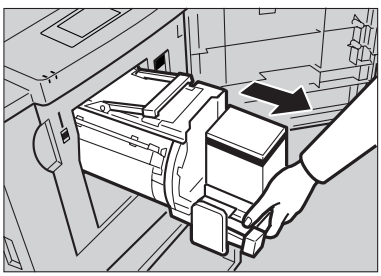
ANT128S

4 **Remove the prints from the paper delivery tray and set them on the paper feed tray again as shown in the illustration.**



ANT079S

5 **Exchange the drum unit. See p.65 "Changing the Color Drum Unit".**



ANT054S

6 **Set the second original and press the【Start】key.**

Combination Chart

This combination chart shows which modes can be used together.

Blank	means that these modes can be used together.
×	means that these modes cannot be used together.

		Function chosen later											
		Master Making Density	**Original Type**	**Fine mode**	**Economy mode**	**Auto Cycle**	**Preset Reduce/Enlarge**	**Combine/Repeat**	**Erase Border**	**Memory/Class**	**Program**	**Skip Feed/A3 Paper Feed**	**On Line**
Function selected first	Master Making Density	--											×
	Original Type		--										×
	Fine mode			--									×
	Economy mode				--								
	Auto Cycle					--							
	Preset Reduce/Enlarge						--						×
	Combine/Repeat							--					×
	Erase Border								--				×
	Memory/Class									--			×
	Program										--		×
	Skip Feed/A3 Paper Feed											--	*1
	On Line	×	×	×			×	×	×	×	×	*1	--

*1 When in On Line mode, the A3 Paper Feed function cannot be used.

If Your Machine Does Not Operate as You Want

The following chart gives explanations of common problems and messages. If other messages appear, follow the instructions displayed. If a malfunction or a misfeed occurs, the following messages will appear on the display.

❖ When a Message is Displayed

Message	Causes	Solutions
`Set the original.`	You have not changed the original on the exposure glass before pressing the 【Start】 key.	Place the next original on the exposure glass or in the ADF.
	An original has not been placed.	Place your originals.
`Set the Drum Unit correctly.`	The drum unit is not set correctly.	Slide in the drum until it clicks. Make sure that the drum is completely set in position.
`Set the Master Eject Box correctly.`	The master eject box is not set correctly.	Make sure that the master eject box is completely set in position.
`Auto-shutdown occurred due to power problems. Press OK to exit.`	A power problem has occurred.	Press 【OK】 key. If it occurs frequently, contact your customer service.

Printing Problems

Problem	Cause	Action
When you try to select several functions at the same time, some of them cannot be selected.	Some functions cannot be used together.	See p.68 “Combination Chart”.
Parts of the image are not printed in Edge Erase mode.	The edge erase margin that you set is too wide.	Adjust the edge erase margin with the user tools. See “Erase Border Width” on p.108 “4 Initial Settings”.
	The original has very narrow margins.	
Prints are blank, or parts of the image are not printed.	The paper feed side plates are not set correctly.	Make sure that the paper feed side plates touch the paper lightly.
Printing in a second color is unsatisfactory.	The first color is still wet.	Wait until the first color becomes dry.
An uneven solid image appears.	Large solid image wrinkles the master.	Increase the printing speed or use Photo mode.

Printing Problems When Using Combine Mode

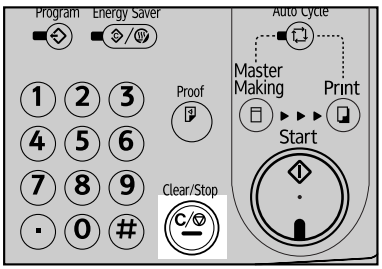
Problem	Cause	Action
Prints are blank or parts of the image are not printed.	Original size and orientation are not correct.	You cannot combine originals of different sizes and orientations.
The image is not printed correctly.	The originals were fed in the wrong order.	When using the optional Auto Document Feeder, place the originals face up. The first original should be on the top.
		When using the exposure glass, place the originals face down on the exposure glass. The first original should be placed first.

Loading Paper into the Paper Feed Tray

The **Load Paper** indicator (🖷) lights when the paper feed tray runs out of paper.

Replenishing Paper

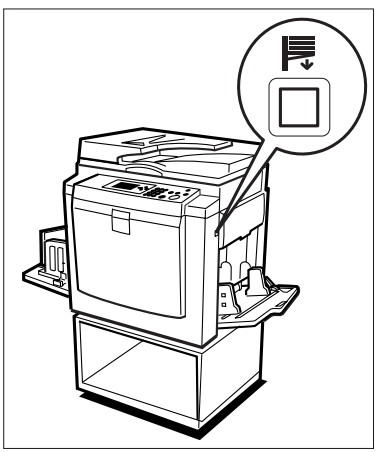
1 **Press the【Clear/Stop】key.**



Note

❒ This step is necessary only if you want to pause a print run to replenish paper.

2 **Press the【Paper Feed Tray Down】key.**

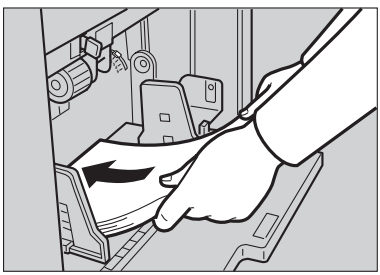


Note

❒ The paper feed tray will lower without the key being pressed when the printing paper runs out.

❒ The top sheet might remain between the feed rollers. In this case, remove the top sheet.

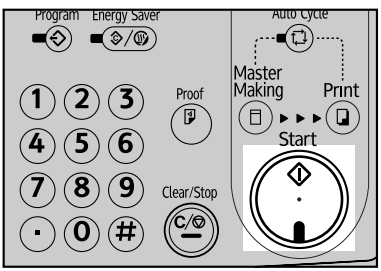
3 **Load paper into the paper feed tray.**



Note

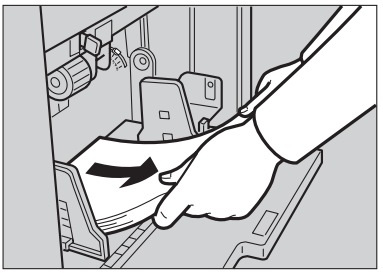
❒ Correct paper curl before setting the paper.

4 **Press the【Start】key to resume printing.**



Changing the Paper Size

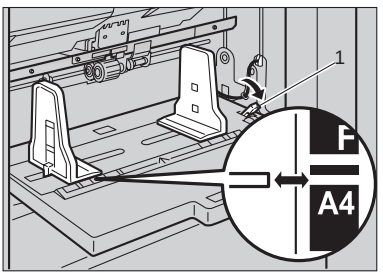
1 **Remove the paper from the paper feed tray.**



ANT073S

The paper feed tray will lower.

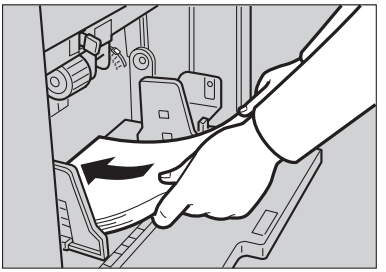
2 **Shift the paper feed side plates lock lever forward. Adjust the paper feed side plates to match the paper size.**



ANT072S

1: Paper Feed Side Plates Lock Lever

3 **Load paper into the paper feed tray.**

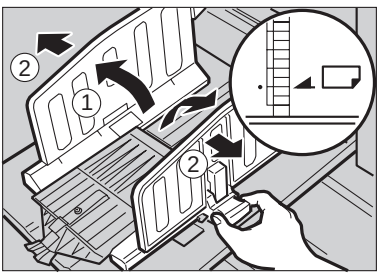


ANT074S

Note

- ❒ Correct any paper curl before setting the paper.
- ❒ Make sure that the side plates touch the paper lightly.
- ❒ Shift the lock lever to its original position.

4 **Adjust the side plates and the end plate.**



ANT062S

When the Add Ink Indicator (🖋) Lights

The **Add Ink** indicator (🖋) lights when it is time to supply ink.

⚠ ***CAUTION:***

- *Keep the ink or ink container out of reach of children.*

⚠ ***CAUTION:***

- *Be careful not to get ink on your clothes when replacing an ink container. Ink stains on clothes are hard to remove.*

⚠ ***CAUTION:***

- *When disposing of a used ink container, reattach the cap to prevent ink from splattering.*

⚠ ***CAUTION:***

- *If your skin comes into contact with ink, wash the affected area thoroughly with soap and water.*

⚠ ***CAUTION:***

- *If ink comes into contact with your eyes, rinse immediately in running water. For other symptoms, consult a doctor.*

⚠ ***CAUTION:***

- *If ink is ingested, induce vomiting by drinking a strong saline solution. Consult a doctor immediately.*

Important

❒ Faults may occur if you use ink other than the recommended type.

❒ Our products are engineered to meet high standards of quality and functionality, and we recommend that you use only the expendable supplies available at an authorized dealer.

Note

❒ Be sure to supply ink of the same color as the current drum.

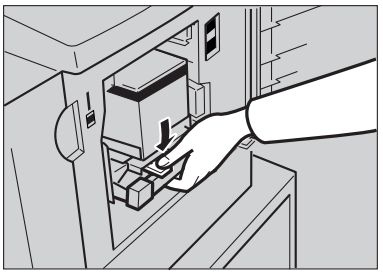
❒ Store ink in a cool, dry place. Do not store ink where it will be exposed to heat or direct sunlight.

❒ Store ink on a flat surface.

1 **Open the front cover.**

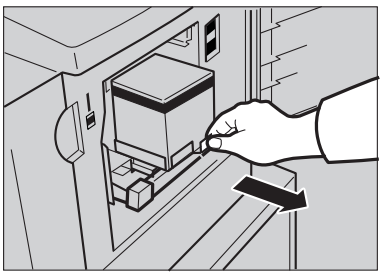
ANT057S

2 **Push the ink holder lever.**



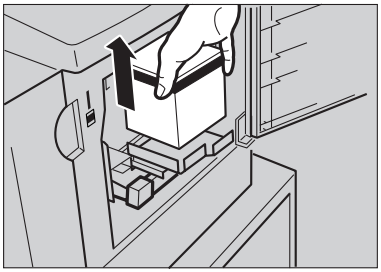
ANT060S

3 **Pull out the ink holder.**



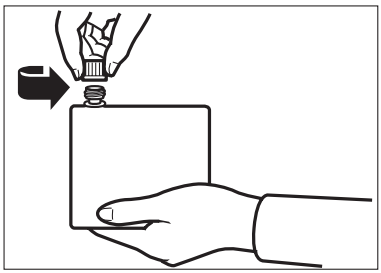
ANT089S

4 **Remove the used ink cartridge.**



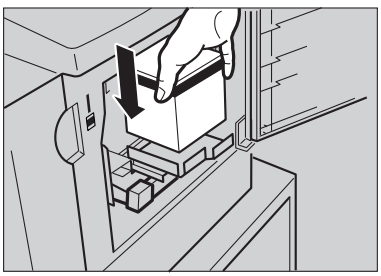
ANT091S

5 **Remove the cap of the new ink cartridge.**



ANT098S

6 **Insert the new cartridge into the ink holder.**

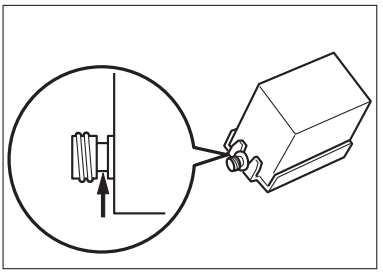


ANT092S

Note

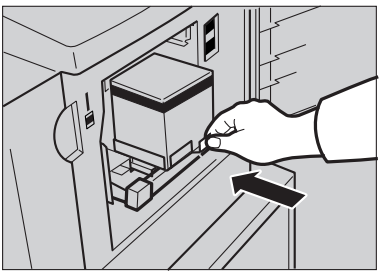
❒ Always supply ink of the same color.

❒ Be sure to firmly insert the part indicated by the arrow mark into the guide.



ANT097S

7 **Return the ink holder to its original position until it clicks.**



ANT090S

8 **Close the front cover.**

ANT059S

The machine will start idling to supply ink to the drum.

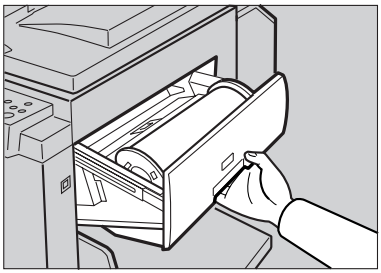
Note

❒ It will stop when the correct amount of ink reaches the drum.

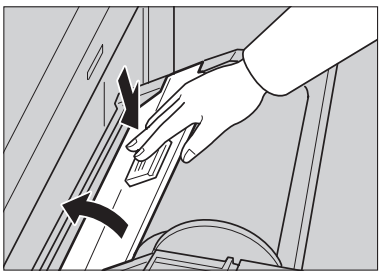
Master Roll Replacement

The **Master End** indicator (🖨) is lit when it is time to replace the master roll.

1 **Pull out the master tray.**

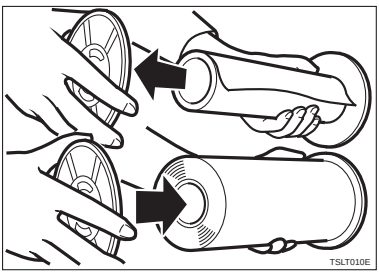

ANT065S

2 **Press the release button to open the master feeding cover.**


ZJVH070E

3 **Unwrap the tape from the new master roll.**

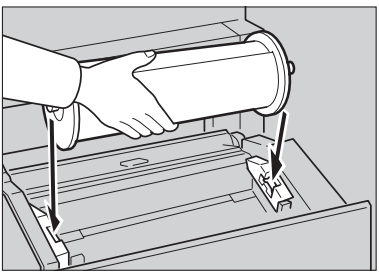
4 **Remove the used master roll and pull out both spools. Then, insert both spools into a new master roll.**


TSLT010E

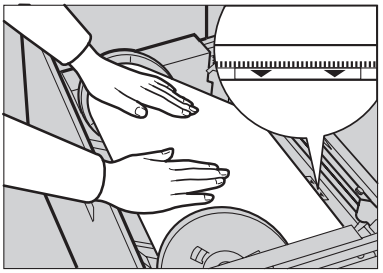
Note

❒ It is necessary to replace the master roll even if some master remains on the old roll.

5 **Set the new master roll in the master tray.**

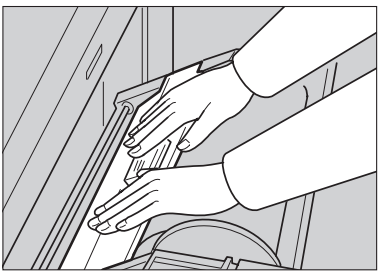

ZFRH260E

6 **Insert the master and set its leading edge to the position of the marks.**



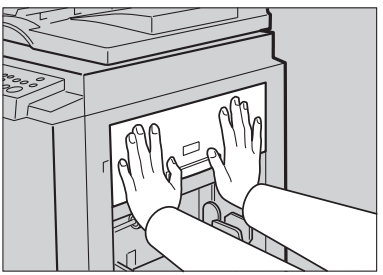
ANT080S

7 **Close the master feeding cover firmly.**



ZFRH250E

8 **Close the master tray.**



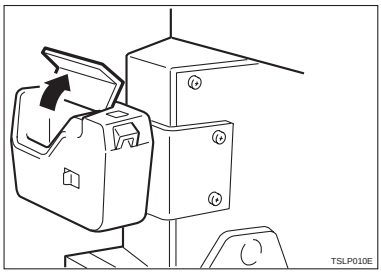
ANT066S

Placing a New Roll of Tape in the Tape Dispenser (Optional)

Note

❒ Make sure that the main switch is turned on and the power switch of the tape dispenser is off.

1 **Open the cover of the tape dispenser.**

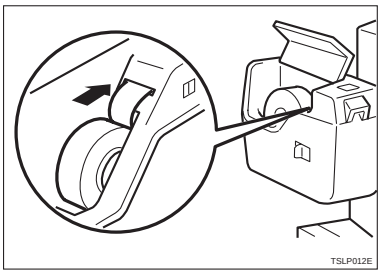


2 **As shown, put the roll in the dispenser.**

Note

❒ Make sure that the tape is installed in the proper direction. If it is not in the correct direction, the tape dispenser will not work correctly.

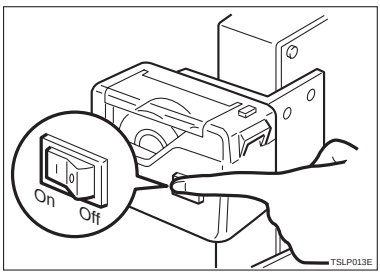
3 **Feed the leading edge of the roll in the dispensing slot until it stops.**



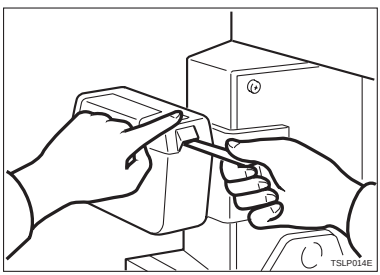
Note

❒ Push the tape as far as possible through the slot.

4 **Turn on the power switch of the tape dispenser.**



5 **Press the manual cut button to trim off the leading edge of the tape.**



Clearing Misfeeds

The location indicators show where the jam has occurred.

Important

❒ When clearing misfeeds, do not turn off the main switch. Otherwise, your print settings are cleared.

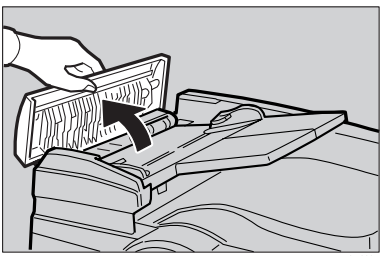
"+ P" Original Misfeeds Occur in the Auto Document Feeder

An original misfeed has occurred in the optional Auto Document Feeder.

Note

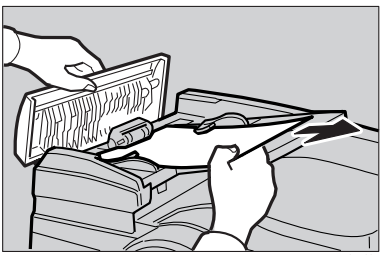
❒ This indicator is only displayed when the machine is equipped with the optional Auto Document Feeder.

1 **Open the Auto Document Feeder cover.**



ZDCY090E

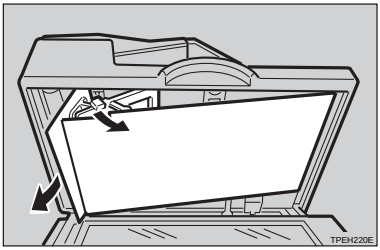
2 **Pull out the original gently.**



ZDCY120E

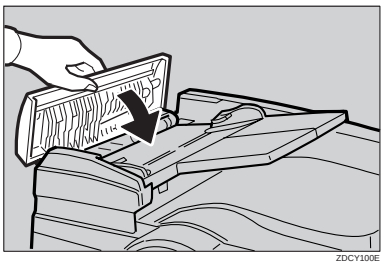
3 **If you are unable to remove the misfed original in Step 2, lift the Auto Document Feeder.**

4 **Pull the green knob towards you to remove the original.**



5 **Return the document feed sheet to its original position.**

6 **Close the Auto Document Feeder cover until it clicks into position.**



To prevent original misfeeds

Use the exposure glass for the following kinds of originals:

- Originals heavier than 128g/m^2, 34 lb.
- Originals lighter than 52g/m^2, 14 lb.
- Originals smaller than 148mm × 210mm, 5.9" × 8.3"
- Originals larger than 297mm × 864mm, 11.6" × 34.0"
- Stapled or clipped originals
- Perforated or torn originals
- Curled, folded, or creased originals
- Originals with any kind of coating, such as thermal fax paper, art paper, aluminum foil, carbon paper, or conductive paper
- Bound originals such as books
- Damaged originals
- Originals with glue on them
- Pasted originals
- Originals written in pencil
- Thin and flimsy originals
- Originals with index tabs
- Transparent originals such as OHP transparencies or translucent paper

Note

❒ You cannot place originals of different sizes at the same time.

❒ Remove staples or clips from the originals, and then fan the originals lightly.

❒ Do not stack originals above the limit mark.

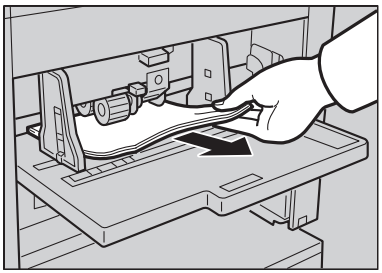
"+ A" Paper Misfeeds in the Paper Feed Section

A paper misfeed has occurred in the paper feed section.

⚠ ***CAUTION:***

- *Be careful not to cut yourself on any sharp edges when you reach inside the machine to remove misfed sheets of paper or masters.*

1 **Slowly but firmly pull out the paper.**



ZFRY010E

2 **If the indicators remain lit, open the front cover and close it firmly or press 【OK】 key.**

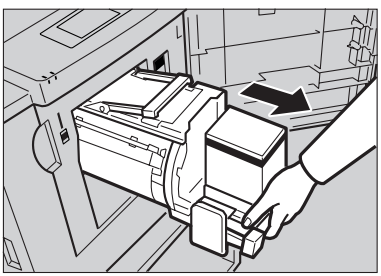
Reference

See p.86 "To prevent paper misfeeds".

"+ B" Paper Wrapped around the Drum

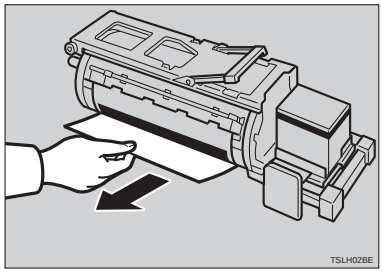
The paper is wrapped around the drum.

1 **Pull out the drum unit.**

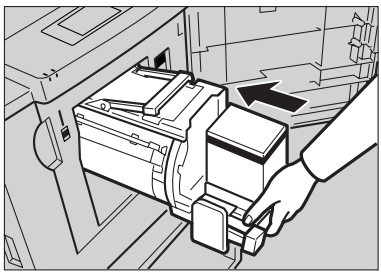


ANT054S

2 **Remove the misfed paper.**



3 **Insert the drum unit until it locks into position, and then lower the drum unit lock lever.**



4 **Close the front cover.**

Reference

See p.86 “To prevent paper misfeeds”.

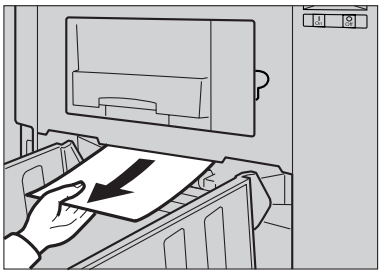
"+ C" Paper Misfeeds in the Paper Exit Section

A paper misfeed has occurred in the paper exit section.

⚠ ***CAUTION:***

- *Be careful not to cut yourself on any sharp edges when you reach inside the machine to remove misfed sheets of paper or masters.*

1 **Remove the misfed paper.**



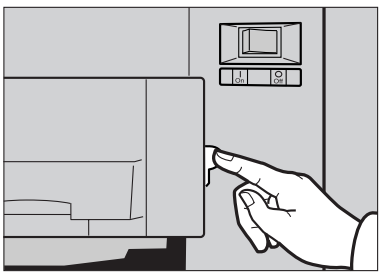
ANT094S

Note

❒ Make sure that the paper delivery end plate and side plates are in their correct positions.

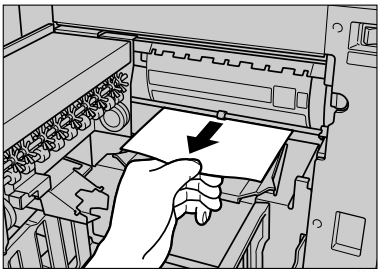
❒ If a jam occurs because the current printing speed is too fast, reduce the speed.

2 **If you can not see the misfed paper, push the button and open the master eject unit.**

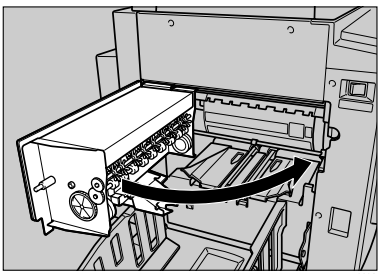


ANT081S

3 **Remove the misfed paper.**


ANT084S

4 **Close the master eject unit.**

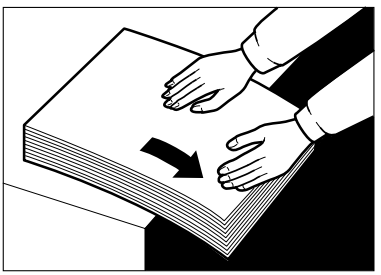

ANT083S

5 **If the indicators remain lit, open the front cover and close it firmly or press [OK] key.**

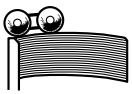
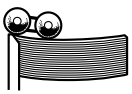
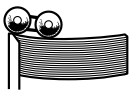
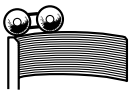
To prevent paper misfeeds

If paper is curled or the margin on the leading edge of the original is too narrow, the following action is necessary.

- Before using the paper, correct the curl as shown below.

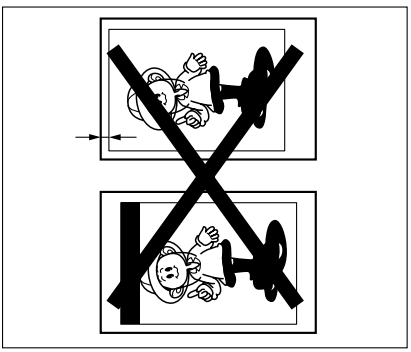

BQA023S

- If you are unable to correct the paper curl, place the paper in the paper feed tray with it curling either upward or downward, as shown in the illustration below.

	Right	Wrong
Thin Paper		
Thick Paper		

TPEY990E

- When the leading edge margin of the original is less than 5mm, 0.2" , or when there is a solid image on the leading edge, feed the original from the edge with the widest margin. Alternately, create a leading edge margin on a duplicate of the original, and then print from the duplicate.



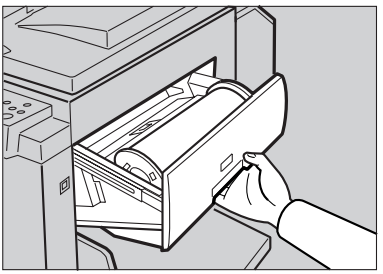
GRLEAD0E

- Depending on the paper type, paper jams or wrinkling may occur. In such cases, reduce the printing speed and then print.
  For details about how to change printing speed, see p.40 “Changing the Printing Speed”.

"🔧 + D" Master Misfeeds in the Master Feed Section

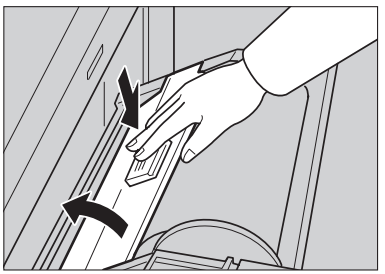
A master misfeed has occurred in the master feed section.

1 **Pull out the master tray.**



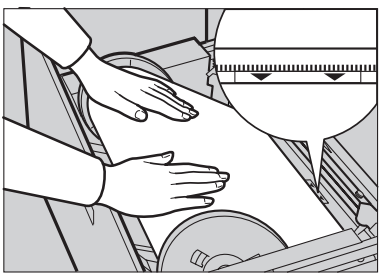
ANT065S

2 **Open the master feeding cover, and then remove the misfed master inside.**



ZJVH070E

3 **Set the leading edge of the master to the position of the marks.**

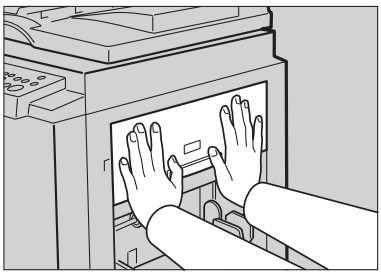


ANT080S

4 **Close the master feeding cover firmly.**

ZFRH250E

5 **Close the master tray.**

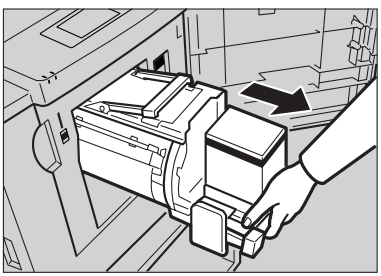


ANT066S

"⚠ + A + B" Paper Misfeeds in the Paper Feed Section

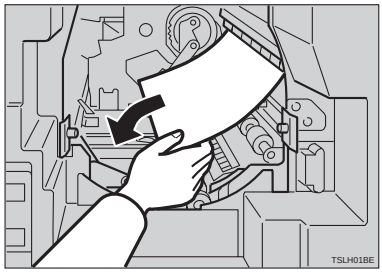
The paper is jammed between the drum and the paper feed section.

1 **Unlock the lever and then pull out the drum unit.**

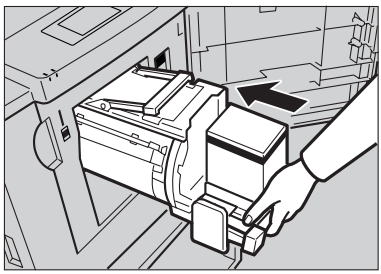


ANT054S

2 **Remove the misfed paper from inside.**



3 **Insert the drum until it locks into position, and then lower the lock lever.**

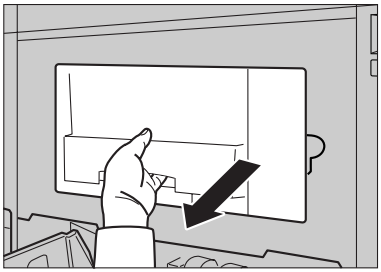


4 **Close the front cover.**

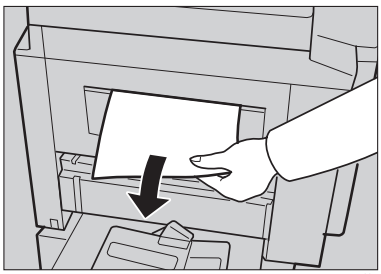
"+ B + E" Master Misfeeds in the Master Eject Section

Either a master misfeed has occurred in the master eject section, or the master is wrapped around the drum unit.

1 **Grip the handle and pull out the master eject box.**


ANT095S

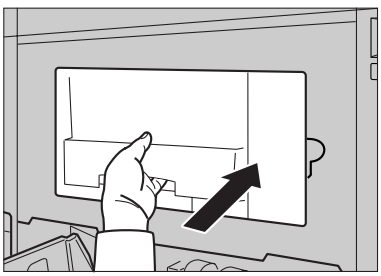
2 **Remove the misfed master.**


ZFRH120E

Note

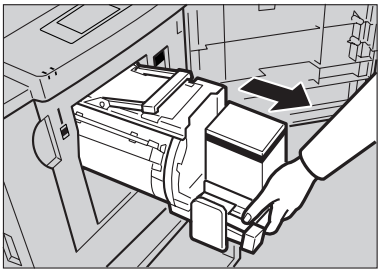
❒ Be careful not to stain your hands with ink when you touch used masters.

3 **Return the master eject box to its original position.**


ANT096S

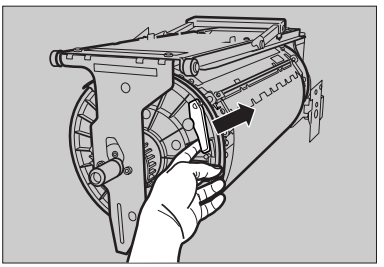
When the master is wrapped around the drum

1 **Unlock the lever and then pull out the drum unit.**



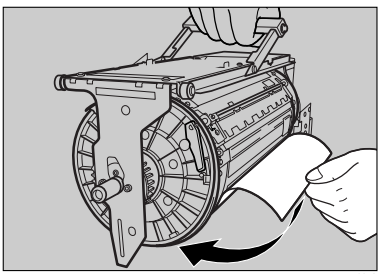
ANT054S

2 **Unlock the lever to open the clamp of drum unit.**



ANT111S

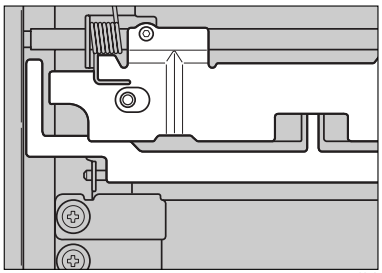
3 **Remove the misfed master.**



ANT085S

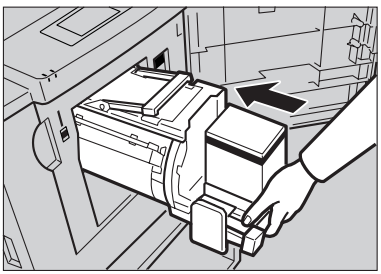
Note

❒ When the lever is released, the clamp will be set back. Make sure that the clamp is set correctly as shown.



ANT087S

4 **Insert the drum until it locks into position, and then lower the lock lever.**



ANT061S

5 **Close the front cover.**

ANT059S

When the Open Cover/Unit Indicator ( ) Lights and a Message is Displayed

A message is displayed explaining the place where the doors/covers are not properly closed.

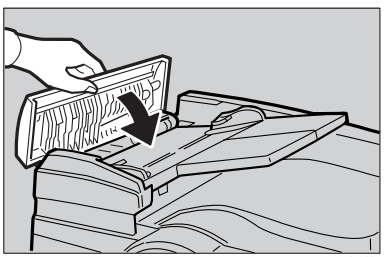
Front Cover is Open

1 **Close the front cover completely.**

ANT059S

Cover of Optional Auto Document Feeder is Open

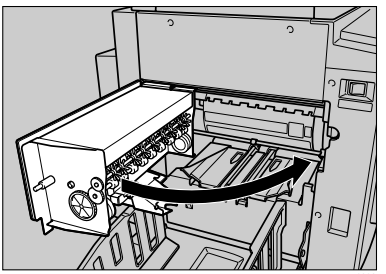
1 **Close the Auto Document Feeder until it clicks into place.**



ZDCY100E

Master Eject Unit is Open

1 **Close the master eject unit.**



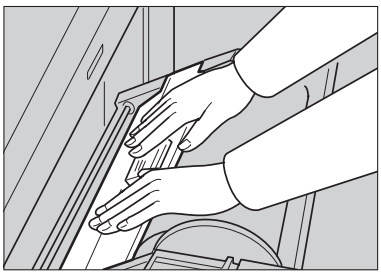
ANT083S

When the Master End Indicator (🖨) Lights and a Message is Displayed

A message is displayed explaining the place in the master feed section that is not properly set.

Master Feeding Cover is Open

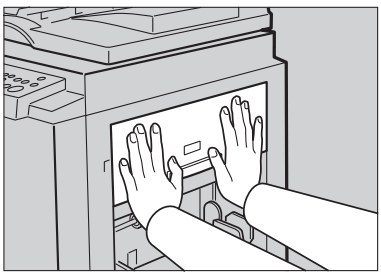
1 **Close the master feeding cover firmly with both hands.**



ZFRH250E

Master Tray is Not Set Properly

1 **Push in the master tray completely.**

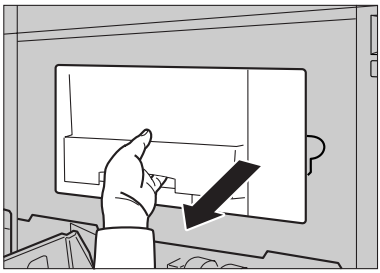


ANT066S

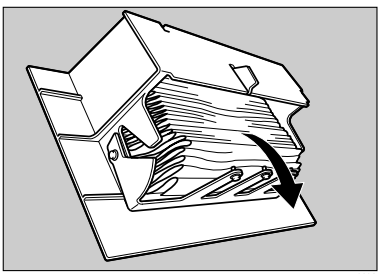
When the Master Eject Indicator (⏏) Lights

The master eject indicator (⏏) lights when it is time to empty master eject box.

1 **Grip the handle and pull out the master eject box.**



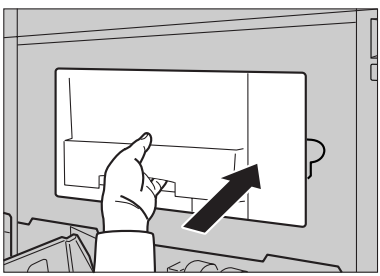
2 **Remove the used masters.**



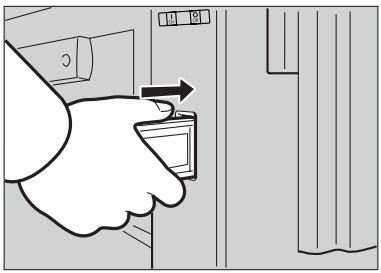
Note

❒ Spread out an old newspaper, and then tip the used masters onto the newspaper. Throw away the used masters.

3 **Return the master eject box to its original position.**

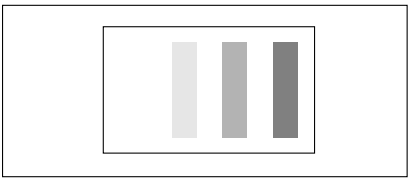


When Other Indicators Light

123 Set Key Counter.	The key counter (option) is not set. Insert the key counter into its slot.  ZCTH130E

Poor Printing

Dirt on the Back Side of Paper

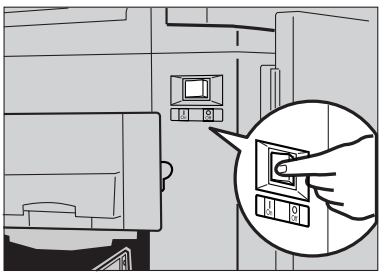


GRDIRT0E

Note

- ❒ When you use paper that is smaller than the original, select the proper reduction ratio. Otherwise, you might get dirty background prints.
- ❒ When you use postcards, the background might be dirty because postcards do not absorb ink well.

1 **Turn off the main switch.**

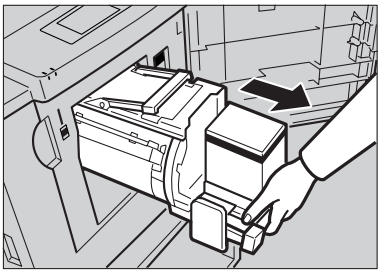


ANT076S

2 **Open the front cover.**

ANT057S

3 **Unlock the lever, and then pull out the drum unit.**

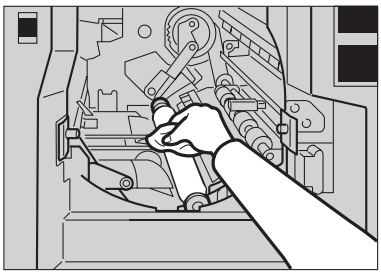


ANT054S

Reference

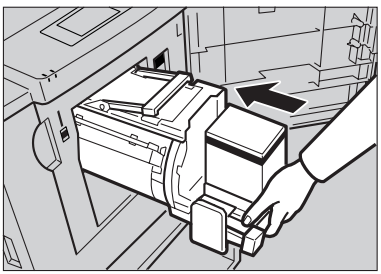
For details about how to remove the drum unit, see p.65 “Changing the Color Drum Unit”.

4 **Clean the pressure roller with a clean cloth.**



ANT058S

5 **Insert the drum unit until it locks into position, and then lower the drum unit lock lever.**

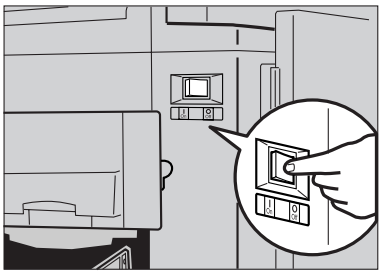


ANT061S

6 **Close the front cover.**

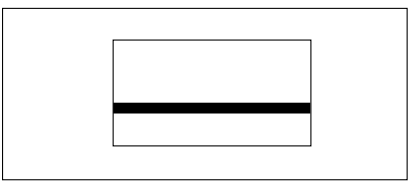
ANT059S

7 **Turn on the main switch.**



ANT077S

Dirt on the Front Side of Paper (Black Line/Stain)

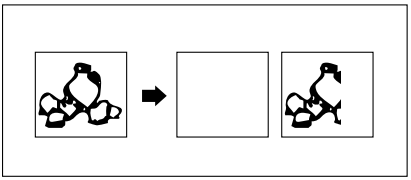


GRBLAC1E

Note

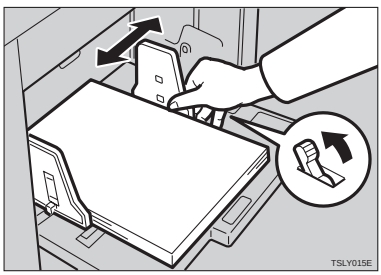
- ❒ If there is no margin or if there is a solid image area near the leading edge of the original, make a margin of at least 5mm, 0.2" at the leading edge. Otherwise, the paper exit pawl might become dirty and cause black lines on prints.
- ❒ Check the exposure glass cover and clean it if dirty. See p.120 “Maintaining the Machine”.
- ❒ Check the exposure glass and clean it if dirty. See p.120 “Maintaining the Machine”.
- ❒ When black lines or stains still appear on prints even if you clean the above, contact your service representative.

Blank Prints or Incomplete Prints



GRWHITOE

- Make sure that the paper feed side plates touch the paper lightly. Shift the lock lever backward.



TSLY015E

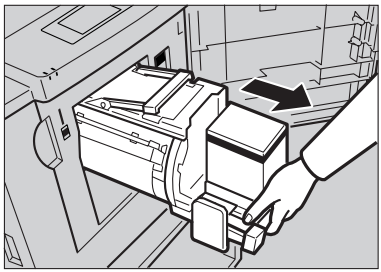
- When you use the optional Auto Document Feeder, make sure that the original guides contact the originals lightly.

When blank or incomplete prints persist even after you have checked the above, perform the following procedure.

1 Open the front cover.

ANT057S

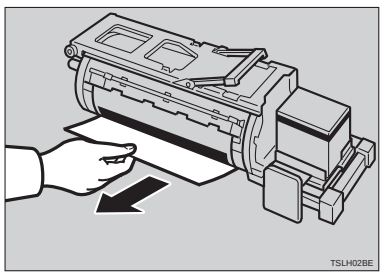
2 **Unlock the lever and pull out the drum unit.**



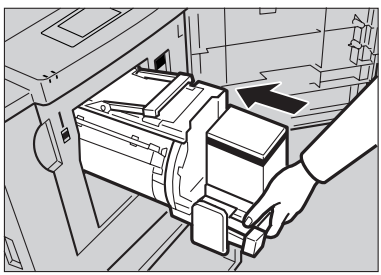
Reference

For details about how to remove the drum unit, see p.120 “Maintaining the Machine”.

3 **Remove paper that is stuck to the drum.**



4 **Insert the drum unit until it locks into position, then lower the drum unit lock lever.**



5 **Close the front cover.**

ANT059S

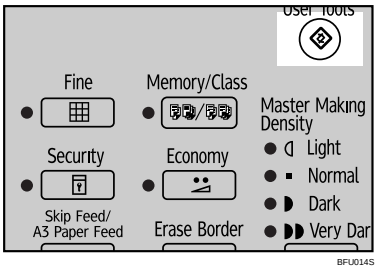
Accessing the User Tools

This section is intended for the machine administrator. The user tools allow the administrator to customize the default settings of this machine.

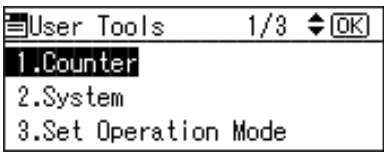
Reference

For the detailed user tool menu, see p.106 “User Tools Menu”.

1 **Press the【User Tools】key.**



2 **Use the【▲】【▼】keys to select the desired user tool.**



Reference

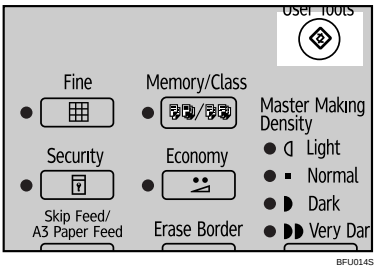
See p.106 “User Tools Menu”.

3 **Enter a number using the number keys or select the desired mode using the【▲】【▼】keys.**

4 **Press the【OK】key.**

Quitting User Tools

1 **To quit the User Tools menu, press the【User Tools】key.**



Note

❒ Changes made to the following user tools become effective when you press the【Clear Modes/Energy Saver】key.

- Program/Change Class
- Program/Change Memory
- Prog./Change: Class/Year
- Skip Feed

User Tools Menu

1 Counter

No.	Mode	Description
1	Display Counter	Shows the total number of masters and prints. **Note** ❒ The trial print will not be counted as part of the total.

2 System

No.	Mode	Description
1	Auto Reset Timer	The machine automatically returns to its initial condition if it has not been operated for a certain period of time. **Note** ❒ Default: *Off*
2	Disp. Resettable Counter	Shows the total number of masters and prints after resetting. **Note** ❒ The trial print will not be counted as part of the total.
3	Reset Resettable Counter	You can select whether or not to clear the number of resettable counter. **Note** ❒ Default: *Do not reset*
4	mm/inch	You can select the units of measurement used on the panel display. **Note** ❒ Default: • Metric version: *mm* • Inch version: *inch*
5	Language on LCD	You can select the language for the panel display. **Note** ❒ Default: *English*
6	Date/Time	You can set the date and time for the machine's internal clock using the number keys.
7	Energy Saver Option	You can select the energy saver mode from Energy Saving or Auto Off. **Note** ❒ Default: *Energy Saving*

No.	Mode	Description
8	Energy Saver Timer	You can specify the time taken for the machine to enter Energy Saver mode. **Note** ❒ Default: *3 min.* (minutes)
9	Auto Off Timer	You can select to use the auto off timer. **Note** ❒ Default: *Off*
10	Data Print	You can print the log data and the counter list.

3 Set Operation Mode

No.	Mode	Description
1	Minimum Print Quantity	You can set a minimum print quantity between 0 and 9999. Any number below the minimum will not be printed. **Note** ❒ Default: *0*
2	Maximum Print Quantity	You can set a maximum print quantity between 0 and 9999. **Note** ❒ Default: *9999*
3	Panel Beeper	You can turn the beeper on or off. **Note** ❒ Default: *Standard* ❒ Available settings: • All On (The beeper sounds either when you press a key or when warning messages are shown on the panel display.) • Standard (The beeper sounds only when warning messages are shown on the panel display and not when you press a key.) • All Off (The beeper does not sound at all.)
4	LCD Contrast	You can adjust the brightness of the panel display.
5	Class Display	Under the Memory/Class function, you can select to have "Select Class/Year" displayed as "Select Department" instead, when the machine is not limited to school or college use. **Note** ❒ Default: *School Year*

4 Initial Settings

No.	Mode	Description
1	Master Making Density	You can specify the image density that is selected by default when the power is turned on. **Note** ❒ Default: *Normal*
2	Original Type	You can specify the original type that is selected by default when the power is turned on. **Note** ❒ Default: *Text*
3	Ratio	You can specify the reproduction ratio that is selected by default when the power is turned on. **Note** ❒ Default: *100% (Full Size)*
4	Economy Mode	You can select to have Economy mode as either "On" or "Off" when the power is turned on, or after mode settings have been cleared. **Note** ❒ Default: *Off*
5	Erase Border Width	You can specify the edge erase margin. **Note** ❒ Default: *5 mm, 0.2"*
6	Program/Change Class	To store settings of the Class mode, see p.52 "Storing Class Mode Settings".
7	Program/Change Memory	To store settings of the Memory mode, see p.50 "Storing Normal Memory Mode Settings" and p.51 "Storing Stack Memory Mode Settings".
8	Prog./Change: Class/Year	To store settings of the Select Class/Year, see p.54 "Registering Class/Year".

5 Mode Settings

No.	Mode	Description
1	Auto Cycle	You can select to have Auto Cycle mode as either "On" or "Off" when the power is turned on. **Note** ❒ Default: *On*
2	Background Correction	When you make prints in Photo, or Text/Photo mode, the background of the prints might appear dirty. In this case, you can select background correction to improve the clarity of your prints. **Note** ❒ Default: *Correct text mode only*
3	Longer Paper	If you are making prints on paper of custom sizes, you can set "Use". **Note** ❒ Default: *Do not Use*
4	Combine/Repeat Priority	You can choose to have either Combine or Repeat selected by default when the power is turned on. **Note** ❒ Default: *Repeat Priority*
5	Cmb/Img Repeat Sep. Line	You can specify the type of separate line of combine and repeat. **Note** ❒ Default: *None*
6	Cancel Combine Setting	You can specify whether Combine/Repeat mode will be automatically cleared after you have finished your print job. **Note** ❒ Default: *Do not Cancel*
7	Skip Feed	You can specify the number of times that the drum rotates when in Skip Feed mode. **Note** ❒ Default: *2 times* ❒ The time can be set from 2 to 9 times.
8	Memory Mode Setting	You can choose to have either Memory mode or Stack Memory mode as the default. **Note** ❒ Default: *Normal* (Memory mode)
9	Auto Class	Under the Class mode, the machine stops after it is finished a Class print job. When you select Auto Class, the machine stops for 2 seconds and then goes on to the next Class print job. **Note** ❒ Default: *Normal*

6 Administrator Tools

❖ **User Codes**

If user codes are turned on, operators must enter their user codes before they can operate the machine. The machine keeps count of the number of masters and prints made under each user code. See "3 User Code Management" below.

1	Display Counter(s)	You can check the number of masters and copies made under each user code.
2	Clear Counter(s)	You can clear each or all of the user code counters. **Reference** To clear the number of masters and copies, see p.114 "Clearing the Counter".
3	User Code Management	You can select whether or not to use User Code mode. **Note** ❒ Default: *Do not Use*
4	Key Counter Adjust	Normally, the optional key counter counts the number of prints regardless of the number of masters used. You can, however, add to the key counter a value between 0 and 50 to the key counter each time a new master is used. **Note** ❒ Default: *0 time* ❒ Range of adjustment: 0–50
5	User Tools Protect	Prevent the initial (User Tools) menu being accessed by users other than the administrator. **Note** ❒ Default: *Off*
6	User Tools Protect PW	Specify a four digit password for setting User Tools Protect.

7 Online Settings

Limitation

❒ The optional printer controller is required for these settings.

❒ The displayed Online Settings menus depend on the type of printer controller.

No.	Mode	Description
1	Hold Data-in	You can select to have Hold Data-in mode either “On” or “Off” when the power is turned on, or after mode settings have been cleared. **Note** ❒ Default: *Off*
2	List/Test Print	Allows you to print the system controller's configuration data.
3	DHCP (Auto-Obtain)	Select either "On" or "Off" for DHCP. If you select "On", the machine obtains its IP address automatically by DHCP. If you select "Off", a static IP address must be manually specified as the machine's IP address. **Note** ❒ Default: *On*
4	IP Address	If you have selected "Off" for the DHCP setting, you must specify a static IP address for the machine here. **Note** ❒ Default: *11.22.33.44*
5	Subnet Mask	If you have selected "Off" for the DHCP setting, you must specify a subnet mask for the machine here. **Note** ❒ Default: *0.0.0.0*
6	Gateway Address	If you have selected "Off" for the DHCP setting, you must specify a gateway address for the machine here. (A gateway is a connection or interchange point between two networks.) **Note** ❒ Default: *0.0.0.0*
7	Ethernet Speed	Allows you to specify the network access speed. **Note** ❒ Default: *Auto Select*

8	I/O Timeout	Allows you to specify how many seconds the machine waits before it cancels a stalled print job. Note that if job data from other ports often arrives while earlier print jobs are in progress, specifying a longer timeout period will prevent the machine canceling the earlier jobs. **Note** ❒ Default: *15Sec.*
9	I/O Buffer	Allows you to specify the size of the I/O Buffer. Normally it is not necessary to change this setting. **Note** ❒ Default: *128KB*
10	Restore Defaults	Allows you to reset changed settings back to their factory-set default values. Note that the following settings do not change: • DHCP • IP Address • Subnet Mask • Gateway Address • Ethernet Speed

User Code

In User Code mode, users need to enter a user code before they can use the machine. The machine keeps count of the numbers of masters and prints under each user code.

Note

❒ To use this feature, User Code mode must be set to "Use". See "3 User Code Management" on p.110 "6 Administrator Tools".

❒ When the User Code mode is on, the machine will prompt you for your user code when you turn on the main switch, or after the machine has been reset.

❒ The following user codes are available:

- 000, 019, 028, 037, 046, 055, 064, 073, 082, 091, 100, 119, 128, 137, 146, 155, 164, 173, 182, 191, 200, 219, 228, 237, 246, 255, 264, 273, 282, 291, 300, 319, 328, 337, 346, 355, 364, 373, 382, 391, 400, 419, 428, 437, 446, 455, 464, 473, 482, 491, 500, 519, 528, 537, 546, 555, 564, 573, 582, 591, 600, 619, 628, 637, 646, 655, 664, 673, 682, 691, 700, 719, 728, 737, 746, 755, 764, 773, 782, 791, 800, 819, 828, 837, 846, 855, 864, 873, 882, 891, 900, 919, 928, 937, 946, 955, 964, 973, 982, 991

Entering the User Code to Use the Machine

1 **Enter your 3–digit user code with the number keys.**

```
Enter User Code, then
press the OK key.
  UserCode:■■■■
```

Note

❒ The user code will not displayed on the panel display.

❒ If you have made a wrong entry, press the 【Clear/Stop】 key and enter the number again.

2 **Press the 【OK】 key.**

3 **Make your Prints.**

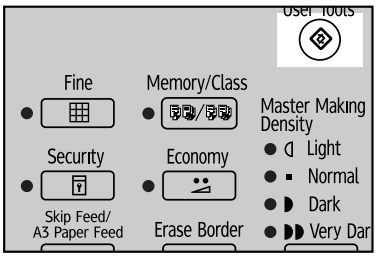
4 **After printing, press the 【Clear Modes/Energy Saver】 key and the 【Clear/Stop】 key at the same time.**

The User Code mode is once again set. Other users will not be able to make prints using your user code.

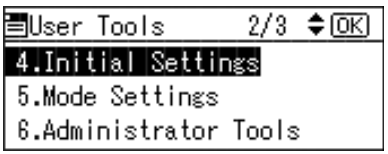
Clearing the Counter

You can clear each or all of the user code counters.

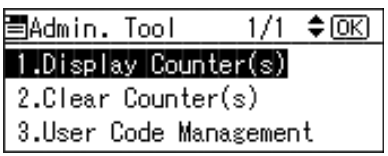
1 **Press the【User Tools】key.**



2 **Use the【▲】【▼】keys to select 6 Administrator Tools, and then press the【OK】key.**

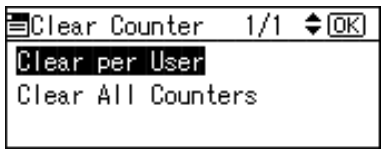


3 **Use the【▲】【▼】keys to select 2 Clear Counter, and then press the【OK】key.**

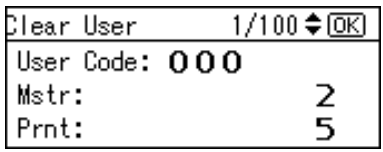


To clear the counter for each user code

❶ **Use the【▲】【▼】keys to select Clear per User.**



❷ **Use the【▲】【▼】keys to select the user code that you wish to clear.**



❸ **Press the【OK】key.**

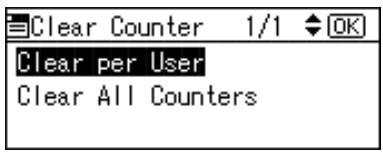
Note

❒ If you have selected the wrong user code, press the **【Cancel】** key to return to the previous display.

❹ **Press the【OK】key.**

To clear the counters for all user codes

❶ **Use the【▲】【▼】keys to select Clear All Counters.**



❷ **Press the【OK】key.**

Operation Notes

General Cautions

- While printing, do not turn off the main switch.
- While printing, do not open the door or covers.
- While printing, do not unplug the power cord.
- While printing, do not move the machine.
- Keep corrosive liquids, such as acid, off the machine.
- Open and close the door and covers softly.
- Do not put anything except originals on the machine.
- Do not spill liquid on the machine.
- When opening or closing the door or covers, keep hold of them so they don't fall.
- When removing the drum unit from the machine, be careful not to let the drum unit fall.
- Do not modify or replace any parts other than the ones specified in this manual.
- Do not operate the machine without covers. You might get your fingers caught in the machine, or the machine might be damaged because, for example, dust or the like might get inside.
- Since some parts of the machine are sharp and might cause injury, touch only the parts specified in this manual.
- If you clean rubber parts with water, wipe them with a dry cloth afterwards.
- Always turn the machine off when you have finished printing for the day.
- If the machine must be transported by vehicle, please contact your service representative.
- Be sure to make a few trial prints to check the image position because the image position of the trial print might not correspond with that of the original.
- If the image registration is not consistent, slow the printing speed down to Setting 1.
- When performing duplex or multicolored printing, leave the printed paper for a while before the next printing in order to let the ink dry on the printed paper. If this is not done, feed roller marks will appear on the print image.
- If the machine is not used for a long period, the image density might decrease because the ink on the drum might dry. Make extra prints until the image density recovers.
- When the machine is used in low temperature conditions, the image density might decrease. In this case, slow the printing speed down to step 1 or 2.

- When making duplex prints, misdetection of paper wrapping might occur if the paper delivery sensor detects a black area at the leading edge of the back side. Keep at least 5 mm, 0.2" margin at the leading edge of the back side of the printing paper.
- Press the 【**Proof**】 key to perform a test print as the first few prints might be light.
- When making duplex prints or when using non-white printing paper, the paper end sensor might malfunction and fail to detect the paper. In this case, place a blank sheet under the printing paper on the paper feed tray.
- The outer portion of the image might not be printed under low temperature. In this case, slow the printing speed down to step 1 or 2, or increase the room temperature.
- The paper exit pawl might contact the printing paper and cause black lines on the prints. In this case, increase the printing speed or make a new master with lighter image density mode.
- If you cannot pull out the drum, close the front cover again to rotate the drum. Pull out the drum after it stopped at the correct position.
- The leading edge of the prints might become stained if the edge touches the image of prints on the paper delivery tray.
- The ink of the print on the paper delivery tray might stick to the back side of the next print.
- When the machine is on and the power source is less than 90% of the specified amount, printing quality will decrease. Therefore, make sure the supply from your electrical outlet is at least 90% of the required amount.
- As various kinds and qualities of paper exist, some paper might be wrapped around the drum or cause misfeeds.
- If your hands are stained with ink:
  - Avoid prolonged or repeated contact with skin.
  - Cleanse skin thoroughly after contact, before breaks and meals, and at the end of the work period.
  - Ink is readily removed from skin by waterless hand cleaners followed by washing with soap and water.
- Also, be careful not to get any ink on your clothing while emptying the master eject box or while loading a new ink cartridge.
- The image density varies according to the printing speed and the room temperature. So, adjust the printing speed or increase the room temperature.
- When you make a lot of prints from a small image, ink might ooze out from the edges of the master, especially under high temperature and when printing in two or more colors. In this case, make a new master.
- Use ink made within one year. Ink stored for a long period tends to dry slowly and yield lower image density.
- While making a master, do not leave the exposure glass cover or optional Auto Document Feeder open.

- In Text/Photo mode, moire patterns might occur when screened originals are printed. In this case, make prints in Text or Photo mode.
- When you use originals with light lettering, edges of the letters might be printed clearly and the inside of the letters might be light. In this case, increase the image density.
- When marks on the printing paper occur, clean the paper feed roller. See p.120 “Maintaining the Machine”.
- If you make a second print before the ink from the first print dries, the ink may adhere to the paper feed roller and soil the print. Before printing on the reverse side of a printed sheet or overprinting on a printed sheet, be sure that the ink on the first print is adequately dry.

Print Paper

- When the paper is curled, stack the paper with the curl face down, otherwise the paper might wrap around the drum or stains might appear.
- Postcards and the like do not absorb ink well. Offset images might appear on the rear side of subsequent prints. Solid image originals will cause offset image prints.

Originals

- If there is no margin or if there is a solid image area near the leading edge of the original, leave a margin of at least 5 mm, 0.2", at the leading edge; otherwise, the paper might wrap around the drum or the paper exit pawl might become dirty and cause black lines on prints.
- If you use originals that have bold letters or solid images at the leading edges, you might get prints with dirty edges. In this case, insert the widest margin first, or raise the printing speed.
- Under the following conditions, the machine might not detect the original on the exposure glass. If you press the **【Master Making】** mode select key again, the machine will start making a master anyway:
  - When you set a dark original on the exposure glass.
  - When the original is not centered according to the size marks on the right scale.
  - If you do not open the exposure glass cover at an angle of more than 30° with the exposure glass when you replace originals.
  - If the machine is installed under a strong light.

Where to Put Your Machine

Your machine's location should be carefully chosen because environmental conditions greatly affect its performance.

Environmental Conditions

Optimum environmental conditions

⚠ ***CAUTION:***

- *Keep the machine away from humidity and dust. Otherwise a fire or an electric shock might occur.*
- *Do not place the machine on an unstable or tilted surface. If it topples over, an injury might occur.*

⚠ ***CAUTION:***

- *Make sure the room where you are using the machine is well ventilated and spacious. Good ventilation is especially important when the machine is used heavily.*

⚠ ***CAUTION:***

- *After you move the machine, use the caster fixture to fix it in place. Otherwise the machine might move or come down to cause an injury.*

- Temperature: 10 – 30°C, 50 – 86°F
- Humidity:
  - Main Frame: 20 – 90%RH
  - Auto Document Feeder (option): 20 – 70%RH
- A strong and level base (a sturdy desk and cabinet etc.).
- The machine must be level within 5 mm, 0.2" both front to rear and left to right.
- Make sure to locate this machine in a large well ventilated room that has an air turnover of more than 30 m^3/hr/person.

Environments to avoid

- Locations exposed to direct sunlight or strong light (more than 1500 lux).
- Locations directly exposed to cool air from an air conditioner or heated air from a heater. (Sudden temperature changes might cause condensation within the machine.)
- Places where the machine might be subjected to frequent strong vibration.
- Dusty areas.
- Areas with corrosive gases.

Power Connection

⚠ ***WARNING:***

- ***Connect the power cord directly into a wall outlet and never use an extension cord.***
- ***Only connect the machine to the power source describe in the manual.***
- ***Do not damage, break or make any modifications to the power cord. Do not place heavy objects on it. Do not pull it hard nor bend it more than necessary. These actions could cause an electric shock or fire.***

⚠ ***CAUTION:***

- *Unplug the power cord from the wall outlet before you move the machine. While moving the machine, you should take care that the power cord will not be damaged under the machine.*

⚠ ***CAUTION:***

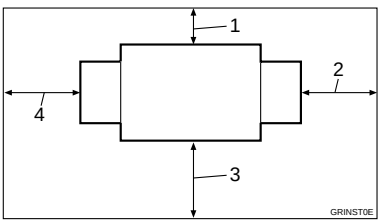
- *When you disconnect the power plug from the wall outlet, always pull the plug (not the cable).*

- The socket-outlet shall be installed near the machine and shall be easily accessible.
- Voltage must not fluctuate more than 10%.

Access to Machine

Place the machine near the power source, providing clearance as shown.

❖ **Main Frame**



1. **More than 10 cm, 4.0"**
2. **More than 60 cm, 23.7"**
3. **More than 60 cm, 23.7"**
4. **More than 60 cm, 23.7"**

Maintaining the Machine

To maintain high print quality, clean the following parts and units regularly.

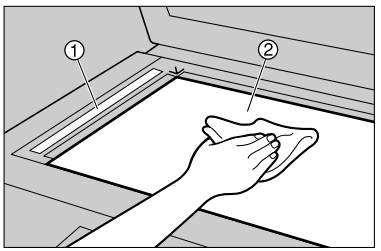
Main Frame

Exposure Glass

1. **Lift the exposure glass cover or optional Auto Document Feeder.**
2. **Clean ① and ②.**

Note

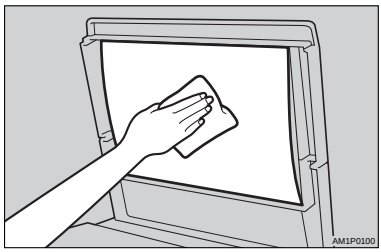
❒ When using the exposure glass, clean ② only.



ZDCH130E

Exposure Glass Cover

1. **Lift the exposure glass cover.**
2. **Clean the exposure glass cover with a damp cloth and wipe it with a dry cloth.**

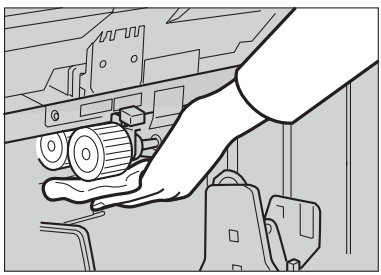

AM1P0100

Note

❒ If you do not clean the exposure glass cover, marks on the cover will be printed.

Paper Feed Roller (paper feed tray)

1. **Wipe off the paper dust on the paper feed roller with a damp cloth, then wipe it with a dry cloth.**


ANT093S

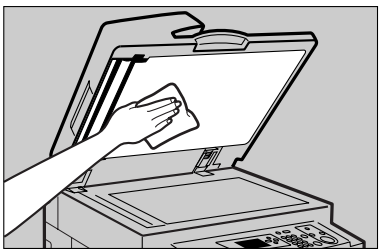
Note

❒ If you do not clean the paper feed roller, paper misfeeds tend to occur.

Optional Document Feeder

Cleaning the Sheet

1. **Lift the document feeder.**
2. **Clean the sheet with a damp cloth and wipe it with a dry cloth.**



ANT056S

Note

❒ If you do not clean the sheet, marks on the sheet will be printed.

Main Frame

❖ **Configuration:**
Desktop

❖ **Printing Process:**
Full automatic one drum system

❖ **Original Type:**
Sheet/Book

❖ **Original Size:**
Maximum 297 mm × 432 mm, 11.7" × 17.0"

❖ **Pixel Density:**
300 × 300 dpi (in Fine mode 300 × 400 dpi)

❖ **Image Mode:**
Text mode
Text/Photo mode
Photo mode
Pale mode
Pencil mode

❖ **Reduction Ratios:**

- Inch version:
  93%, 77%, 74%, 65%
- Metric version:
  93%, 87%, 82%, 71%

❖ **Enlargement Ratios:**

- Inch version:
  155%, 129%, 121%
- Metric version:
  141%, 122%, 115%

❖ **Printing Area:**
210 mm × 355 mm, 8.3" × 14.0"

❖ **Print Paper Size:**
Maximum 275 mm × 395 mm, 10.9" × 15.6"
Maximum 297 mm × 420 mm, 11.6" × 16.5" (When the A3 Paper Feed function is used)
Minimum 90 mm × 140 mm, 3.5" × 5.5"

❖ **Leading Edge Margin:**
5 mm ± 3 mm, 0.2" ± 0.12"

❖ **Print Paper Weight:**
47.1 g/m^2 to 209.3 g/m^2, 12.5 lb. to 55.6 lb.

- When the A3 Paper Feed function is used
  52.3 g/m^2 to 157 g/m^2, 14 lb. to 42 lb.

❖ **Print Speed:**
3 steps

- Setting 1: 80 sheets/minute
- Setting 2: 100 sheets/minute
- Setting 3: 130 sheets/minute

Setting 1 fixed (When the A3 Paper Feed function is used)

❖ **First Copy Time (Master Process Time):**
32.0 seconds (A4▭, 8^1/$_2$" × 11"▭)
(When setting an original on the exposure glass)

❖ **Second Copy Time (First Print Time):**
34.0 seconds (A4▭, 8^1/$_2$ " × 11"▭)
(When setting an original on the exposure glass)

❖ **Color Printing:**
Drum unit replacement system (black, red, blue, green, brown, yellow, purple, navy, maroon, orange and teal)

❖ **Image Position Adjustment:**

- Vertical:
  ± 10 mm, ± 0.4"
  -10 mm, -0.4" fixed (When the A3 Paper Feed function is used)
- Side:
  10 mm, 0.4" (for either side)
  In A3 paper feed mode, adjust the print position to within ± 1 mm, ± 0.04" of the center.

❖ **Paper Feed Tray Capacity:**
1,000 sheets (64 g/m^2, 17 lb.)

❖ **Paper Delivery Tray Capacity:**
1,000 sheets (64 g/m^2, 17 lb.)
500 sheets (64 g/m^2, 17 lb.)(When the A3 Paper Feed function is used)

❖ **Master Eject Box Capacity:**
30 masters

❖ **Dimensions (W × D × H):**

	Width	Depth	Height
Stored	750 mm, 29.5"	681 mm, 26.8"	633 mm, 24.9"
Stored with Auto Document Feeder	750 mm, 29.5"	681 mm, 26.8"	686 mm, 27.0"
Set up	1,244 mm, 49.0"	681 mm, 26.8"	633 mm, 24.9"
Set up with Auto Document Feeder	1,244 mm, 49.0"	681 mm, 26.8"	686 mm, 27.0"

❖ **Weight:**

- Main Frame with Exposure Glass Cover: 70 kg, 154.3 lb.
- Main Frame with optional Auto Document Feeder: 75 kg, 165.3 lb.

❖ **Noise Emission *1:**

Sound Power Level

	Printing Speed	Noise Emission
Ready mode	--	34 dB(A)
During printing	130 cpm	84 dB(A)

Sound Pressure Level*2

	Printing Speed	Noise Emission
Ready mode	--	20 dB(A)
During printing	130 cpm	70 dB(A)

*1 The above measurement made in accordance with ISO 7779 are actual value.
*2 It is measured at the position of the operator.

❖ **Power Source:**

See the inside front cover of this manual.

❖ **Power Consumption:**

Printer Controller	Printer Unit VC-20 *1	Printer Unit Type 4545 *2
Sleep mode	Less than 0.0039 kW	Less than 0.0063 kW
Ready mode	Less than 0.02 kW	Less than 0.023 kW
Master Making	Less than 0.19 kW	Less than 0.19 kW
Printing: Speed 1	Less than 0.135 kW	Less than 0.135 kW
Printing: Speed 2	Less than 0.155 kW	Less than 0.155 kW
Printing: Speed 3	Less than 0.19 kW	Less than 0.19 kW

*1 Non Network Connectable
*2 Network Connectable

❖ **Optional Equipment:**

- Color Drum
  LG Drum
- Key Counter
- Tape Dispenser
- Auto Document Feeder
- Exposure Glass Cover
- Printer Controller
  Printer Unit VC-20
  Printer Unit Type 4545

Auto Document Feeder (ADF)

❖ **Mode:**
- ADF mode

❖ **Original size:**
- A3 – A5
- 11" × 17" – $5^1/_2$" × $8^1/_2$"

❖ **Original weight:**
- One-sided originals: 52 – 105 g/m^2 (14 – 28 lb.)

❖ **Number of originals to be set:**
- 30 sheets (80 g/m^2, 20 lb.)

❖ **Maximum power consumption:**
- Less than 25 W (power is supplied from the main unit.)

❖ **Dimensions (W × D × H):**
- 550 × 470 × 90 mm, 21.7" × 18.6" × 3.6"

❖ **Weight:**
- 7 kg (15 lb.) or less

Note

❒ Specifications are subject to change without notice.

Consumables

Name	Size	Remarks
Master for LG drum	Length: 125 m, 410ft/roll Width: 240 mm, 9.5" 2 Rolls/case	260 masters can be made per roll
Ink-Black	600ml/pack, 5 packs/case	Environmental conditions: – 5 to 40°C, 10 to 95%RH
Ink-Red	600ml/pack, 5 packs/case	
Ink-Blue	600ml/pack, 5 packs/case	
Ink-Green	600ml/pack, 5 packs/case	
Ink-Brown	600ml/pack, 5 packs/case	
Ink-Yellow	600ml/pack, 5 packs/case	
Ink-Purple	600ml/pack, 5 packs/case	
Ink-Navy	600ml/pack, 5 packs/case	
Ink-Maroon	600ml/pack, 5 packs/case	
Ink-Orange	600ml/pack, 5 packs/case	
Ink-Teal	600ml/pack, 5 packs/case	
Tape for Tape dispenser	35 m (114.8 ft)/roll	

Note

❒ Specifications are subject to change without notice.

INDEX

A

A3 Paper Feed, 60
Access to Machine, 119
ADF, 11
Administrator Tools, 110
Auto Class, 109
Auto Cycle, 109
【Auto Cycle】key, 13
Auto Delete Margin Shadow, 44
Auto Document Feeder, 9, 11
    misfeed, 80
Auto Document feeder (ADF), 127
Auto Reset, 32, 106

B

Background Correction, 109
Basic procedure, 30
Blank Prints, 101

C

【Cancel】key, 12
Changing the Color Drum Unit, 65
Changing the Paper Size, 72
Changing the Printing Speed, 40
Class Display, 107
Class Mode, 47
Class/Year, 54
Class/Year Mode, 46
Clear Counter(s), 110
Clearing the Counter, 114
【Clear Modes/Energy Saver】key, 13
【Clear/Stop】key, 13
Combination chart, 68
Combine, 56
【Combine/Repeat】key, 13
Combine/Repeat Priority, 109
Consumables, 128
Control panel, 9, 12
Counter, 12, 106

D

Data In indicator (Green), 13
DHCP (Auto-Obtain), 111
Display Counter, 106
Display Counter(s), 110
Display Resettable Counter, 106
document feeder
    cleaning, 121
Drum unit, 10
Drum unit lock lever, 10

E

【Economy】key, 12
Economy Mode, 45, 108
Energy Saver mode, 32
Energy Saver Timer, 107
Enlarging, 42
Enter key, 13
Environments to avoid, 118
Erase Border, 44
【Erase Border】key, 12
Erase Border Width, 108
Error indicator (Red), 13
Ethernet Speed, 111
Exposure glass, 10
exposure glass
    cleaning, 120
Exposure glass cover, 9
exposure glass cover
    cleaning, 120

F

Feed roller pressure lever, 9
【Fine】key, 13
Fine Mode, 42
Folding the Paper Feed Tray and Delivery Tray, 26
Front cover, 9
【Full Size】key, 13

G

Gateway Address, 111
Guide to Components, 9

H

Hold Data-in, 62, 111
【Hold Data-in】key, 13

I

Image Position, 37
【Image Position】key, 13
Incomplete Prints, 101
Indicators, 12
Initial Settings, 108
Ink
    Add ink indicator (), 73

Ink holder, 10
I/O Buffer, 112
I/O Timeout, 112
IP Address, 111

J

【Job Reset】key, 13

K

Key Counter Adjust, 110

L

Language on LCD, 106
LCD Contrast, 107
List/Test Print, 111
Loading Paper, 23
Loading Paper into the Paper Feed Tray, 71
location indicator, 80
Longer Paper, 109

M

Main Frame, 123
main frame
cleaning, 120
Main switch, 10
Maintaining the Machine, 120
Make Color Prints, 65
Making Color Prints, 66
master
Master eject indicator (⏏), 96
Master eject box, 10, 96
Master eject unit, 10
Master end indicator (📷)
When the Master End Indicator (📷) Lights and a Message is Displayed, 95
Master Making Density, 41, 108
【Master Making Density】key, 12
【Master Making】mode select key, 13
Master misfeeds
in the master eject section, 91
in the master feed section, 88
Master Roll Replacement, 77
Master tray, 9
Maximum Print Quantity, 107
Memory/Class, 45
Class Mode, 45, 47
Class/Year, 54
Class/Year Mode, 46
Memory Mode, 46, 48
Recall Program, 46, 50
【Memory/Class】key, 12
Memory Mode, 48
Minimum Print Quantity, 107
Misfeed, 80
misfeed
location indicators, 80
mm/inch, 106
Mode Settings, 109

N

Normal Memory Mode, 48
Number keys, 13

O

【OK】key, 12
Online Printing, 62
Online Settings, 111
Open Cover/Unit indicator (📄), 94
Open Cover/Unit indicator (📄)
Auto Document Feeder Cover is Open, 94
Front Cover is Open, 94
Master Eject Unit is Open, 94
Operation Notes, 115
Optimum environmental conditions, 118
Options, 11
Original misfeeds, 80
Originals, 17
Original Type, 36, 108
【Original Type】key, 13

P

Pale
Original Type, 36
Panel Beeper, 107
Panel Display, 12, 14
Panel Display Layout, 15
Paper delivery end plate, 10
Paper delivery side plates, 10
Paper delivery tray, 10
paper feed roller
cleaning, 120
Paper feed side plate lock lever, 9
Paper feed side plates, 9
Paper feed tray, 9
Misfeed, 83
Paper feed tray down key, 9
Paper misfeeds
in the paper feed section, 83, 89
Paper misfeeds in the paper exit section, 85
Paper wrapped around the drum, 83
Pencil
Original Type, 36
Photo
Original Type, 36

Placing
originals, 28
originals in auto document feeder, 28
originals on exposure glass, 28
Placing a New Roll of Tape in the Tape Dispenser, 79
Placing Originals, 28
Poor Printing, 98
Dirt on the Back Side of Paper, 98
Dirt on the Front Side of Paper, 100
Power connection, 119
Preset Reduce/Enlarge, 42
Printer controller, 62
Printing Functions, 41
Printing in Two Colors, 67
Printing Problems, 70
When Using Combine Mode, 70
Printing Size, 22
Print mode select key, 13
Print paper, 19
Processing indicators, 13
Prog.Change
Class/Year, 108
Program, 63
Recalling, 64
Registering Print Settings, 63
Program/Change Class, 108
Program/Change Memory, 108
【Program】 key, 12
【Proof】 key, 13

R

Ratio, 108
Recall Program, 46, 50
Recommended Sizes and Weights of Originals, 17
【Reduce/Enlarge】 key, 13
Reducing, 42
Repeat, 59
Replenishing Paper, 71
Reset Resettable Counter, 106
Restore Defaults, 112

S

Safety Information, 5
【Security】 key, 13
Security Mode, 61
Separation pressure lever, 9
Set Operation Mode, 107
Setting Up the Paper Delivery Tray, 24
Shifting the Image Position Forward or Backward, 37
Shifting the Image Position to the Right or Left, 38
Side tray fine adjusting dial, 9
Skip Feed, 60
Skip feed/A3 Paper Feed, 60
【Skip Feed/A3 Paper Feed】 key, 13
【Speed】 key, 13
Stack Memory Mode, 49
【Start】 key, 13
Subnet Mask, 111
System, 106

T

tape dispenser, 79
Text
Original Type, 36
Text/Photo
Original Type, 36
Troubleshooting, 69

U

user code, 110, 113
User Code Management, 110
user tools
Accessing the User Tools, 105
Quitting User Tools, 105
User Tools Menu, 106
【User Tools】 key, 12
User Tools Protect, 110
User Tools Protect PW, 110

W

Where to Put Your Machine, 118

MEMO

Note to users in the United States of America

Note:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio /TV technician for help.

Caution:

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note to users in Canada

Note:

This Class B digital apparatus complies with Canadian ICES-003.

Remarque concernant les utilisateurs au Canada

Avertissement:

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

In accordance with IEC 60417, this machine uses the following symbols for the main switch:

| means POWER ON.

○ means POWER OFF.

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Operating Instructions

Type for DX 3343/LDD130/3183DNP
Printed in China
EN (USA) C275-8608

C2758608

Quick Install Guide

❖ English

Read this carefully before using this product. For safe and correct use, please be sure to read the Safety Information in “Operating Instructions” before using the product.

1. Installing the VC-20 software

Important:

Do not plug the USB cable into the computer before the VC-20 software has been installed.

In order to run this install procedure, ensure the computer has been logged on with administrative rights.

1.1. Insert the CD ROM into the computer.

1.2. Select [Quick Install] to install the VC-20 software.

1.3. After installing the software, the [Add Printer Wizard] automatically starts. Ensure the following options are selected during the printer driver installation.
Printer Type - Local Printer. (Automatically detect plug & play printers - NOT selected).
Port - Select VC-20 port.
Printer Driver - See Digital Duplicator groups table for the correct driver for the duplicator being used.

Important:

Win98SE and ME do not automatically locate the printer driver files. Direct installation when prompted to, c:\Program Files\VC-20\Printer.

Win 98SE and ME require the operating system installation disk.

1.4. When the [Digital Signature Not Found] dialogue appears select [Continue Anyway] for Win XP or [Yes] to continue for Win 2000.

1.5. Click [Close] when the installation is complete.

1.6. Reboot the computer. Win98SE and ME will automatically reboot.

2. Installing the VC-20 Hardware

Important:

This procedure must only be done after the software has been installed.
Some digital duplicators require an interface kit to install VC-20 Hardware. Contact a service technician to confirm.

2.1. Connect the USB cable to the VC-20 port.

2.2. Connect the opposite end of the USB cable to an available USB port on the computer.

2.3. The computer will automatically detect that new hardware has been found. At the [Welcome to the Found New Hardware Wizard], ensure [Install the software automatically (recommended)] is selected.

Important:

If the USB driver files are not located automatically, direct the installation to c:\Program Files\VC-20\USB.

2.4. Click [Finish] at the [Completing the Found New Hardware Wizard] dialogue box.

2.5. The computer will reboot automatically for Windows 98SE and ME. For Windows 2000 and XP the computer will request a restart. Click [Yes].

Note:

The VC-20 requires power from the USB port of the computer. Please ensure that there is sufficient power available. The VC-20 requires 200 mA.

❖ Deutsch

Lesen Sie dies sorgfältig, bevor Sie das Produkt verwenden. Lesen Sie bitte im Hinblick auf einen sicheren und korrekten Gebrauch die Sicherheitshinweise in der “Bedienungsanleitung”, bevor Sie das Produkt verwenden.

1. Installation der Software VC-20

Wichtig:

Schließen Sie das USB Kabel nicht an den Computer an bevor die Software VC-20 installiert worden ist.

Um das Installationsverfahren zu starten, stellen Sie sicher, dass der Computer mit Administratorrechten angemeldet wurde.

1.1. Legen Sie die CD-ROM in den Computer ein.

1.2. Wählen Sie [Express-Installation], um die Software VC-20 zu installieren.

1.3. Nach der Installation der Software startet der [Druckerinstallations-Assistent] automatisch. Achten Sie darauf, dass folgende Optionen während der Druckertreiberinstallation aktiviert sind.
Druckertyp – Lokaler Drucker (Automatische Ermittlung von Plug & Play Druckern – NICHT ausgewählt).
Anschluss – VC-20 Anschluss auswählen.
Druckertreiber – siehe Gruppentabelle Digital Duplicator für den korrekten Treiber für den zu verwendenden Duplicator.

Wichtig:

Win98SE und ME lokalisieren nicht automatisch die Druckertreiberdateien. Installieren Sie sie direkt von c:\Programme\VC-20\Printer, wenn die entsprechende Aufforderung erscheint.

Win 98SE und ME benötigen die Installations-CD des Betriebssystems.

1.4. Wenn das Dialogfeld [Digitale Signatur nicht gefunden] angezeigt wird, wählen Sie [Trotzdem fortfahren] unter Win XP oder [Ja] unter Win 2000.

1.5. Klicken Sie auf [Schließen], wenn die Installation abgeschlossen ist.

1.6. Starten Sie den Computer neu. Win98SE und ME starten automatisch neu.

2. Installation der Hardware VC-20

Wichtig:

Dieser Vorgang darf erst nach der Installation der Software durchgeführt werden.

Einige Digital Duplicator erfordern einen Schnittstellen-Installationssatz, um die Hardware VC-20 zu installieren. Nehmen Sie Kontakt mit einem Kundendiensttechniker auf, um es sich bestätigen zu lassen.

2.1. Schließen Sie das USB Kabel an den VC-20-Anschluss an.

2.2. Schließen Sie das entgegengesetzte Ende des USB Kabels an einen verfügbaren USB-Anschluss am Computer an.

2.3. Der Computer stellt automatisch fest, dass neue Hardware gefunden worden ist. Achten Sie darauf, dass beim [Assistent ‘Willkommen neue Hardware gefunden’], folgende Option [Automatische Installation der Software (empfohlen)] aktiviert ist.

Wichtig:

Werden die USB-Treiberdateien nicht automatisch lokalisiert, geben Sie für die Installation den Pfad “C:\Programme\VC-20\USB” an.

2.4. Klicken Sie auf [Fertigstellen] beim Dialogfeld [Fertigstellung der gefundenen neuen Hardware-Assistent].

2.5. Der Computer startet automatisch neu unter Windows 98SE und ME. Der Computer erfordert einen Neustart unter Windows 2000 und XP. Klicken Sie auf [Ja].

Hinweis:

Der VC-20 bezieht den benötigten Strom vom USB-Anschluss des Computers. Stellen Sie sicher, dass die verfügbare Stromstärke hoch genug ist. Der VC-20 benötigt eine Stromstärke von 200 mA.

❖ Français

Veuillez lire ce document attentivement avant d’utiliser le produit. Merci de prendre connaissance des informations relatives à la sécurité (section « Instructions pour l’utilisation ») avant d’utiliser le produit.

1. Installation logicielle de VC-20

Attention:

Ne pas brancher le câble USB sur l’ordinateur tant que le logiciel VC-20 n’a pas été installé.

Pour pouvoir exécuter cette procédure d’installation, vous devez être connecté avec des droits d’administrateur.

1.1. Insérez le CD ROM dans le lecteur de l’ordinateur.

1.2. Sélectionnez [Installation rapide] pour installer le logiciel VC-20.

1.3. Une fois l’installation du logiciel terminée, l’[Assistant Ajout d’imprimante] démarre automatiquement. Vérifiez que les options suivantes sont sélectionnées lors de l’installation de l’imprimante.
Type d’imprimante - Imprimante locale. (Détection et installation automatique de l’imprimante Plug-and-Play – NON sélectionnée).
Port – Sélectionnez le port VC-20.
Pilote d’imprimante – Accédez à la table Digital Duplicator groups (groupe de duplicopieurs numériques) pour rechercher le pilote approprié pour le duplicateur que vous souhaitez utiliser.

Attention:

Windows 98SE et ME ne rechercheront pas automatiquement les fichiers de pilote d’imprimante. Si le système vous y invite en cours d’installation, indiquez le chemin c:\Program Files\VC-20\Printer.

Sous Windows 98SE et ME, le disque d’installation du système d’exploitation devra être utilisé.

1.4. Dans la boîte de message [Signature numérique introuvable] qui s’affiche, sélectionnez [Continuer] sous Windows XP ou [Oui] sous Windows 2000 pour poursuivre.

1.5. Cliquez sur [Fermer] lorsque l’installation est terminée.

1.6. Redémarrez l’ordinateur. Windows 98SE et ME redémarreront automatiquement.

2. Installation matérielle du VC-20

Attention:

Cette procédure doit être exécutée uniquement après l’installation du logiciel.

Sur certains duplicopieurs numériques un kit d’interface est requis pour l’installation matérielle du VC-20. Pour plus de détails, contactez un technicien du Support technique.

2.1. Branchez le câble USB sur le port du VC-20.

2.2. Branchez l’autre extrémité du câble USB sur un port disponible de votre ordinateur.

2.3. L’ordinateur détectera automatiquement ce nouveau matériel ajouté. Dans la boîte de dialogue [Assistant Ajout de nouveau matériel détecté], vérifiez que l’option [Installer le logiciel automatiquement (recommandé)].

Attention:

Si les fichiers pilotes d’USB ne sont pas localisés automatiquement, dirigez l’installation vers c:\Program Files\VC-20\USB.

2.4. Cliquez sur [Terminer] dans la boîte de dialogue [Fin de l’Assistant Ajout de nouveau matériel détecté].

2.5. L’ordinateur va redémarrer automatiquement pour Windows 98SE et ME. Pour Windows 2000 et XP, l’ordinateur demande de redémarrer. Cliquez sur [Oui].

Remarque:

Le VC-20 doit être alimenté via le port USB de l’ordinateur. Vérifiez que la tension est suffisante : le VC-20 requiert 200 mA.

❖ Italiano

Leggere attentamente la presente guida prima di usare il prodotto. Per un utilizzo corretto e sicuro, leggere la sezione Informazioni di sicurezza delle “Istruzioni per l’uso”, prima di usare il prodotto.

1. Installazione del software VC-20

Importante:

Non collegare il cavo USB al computer prima di aver installato il software VC-20.

Per avviare questa procedura di installazione, verificare di avere effettuato l’accesso al computer come amministratore.

1.1. Inserire il CD ROM nel computer.

1.2. Selezionare [Installazione rapida] per installare il software VC-20.

1.3. Dopo aver installato il software, l’utility [Installazione guidata stampante] viene eseguita automaticamente. Verificare che sia selezionata le seguenti opzioni durante l’installazione del driver della stampante.
Tipo stampante – Stampante locale. (Rileva automaticamente tutte le stampanti plug-and-play – NON selezionato).
Porta – Selezionare la porta VC-20.
Driver della stampante – Vedere la tabella dei gruppi duplicatori digitali per il driver adeguato al duplicatore da usare.

Importante:

Win98SE e ME non trovano automaticamente i file dei driver della stampante. Quando richiesto, indirizzare l’installazione nella directory, c:\Program Files\VC-20\Printer.

Win 98SE e ME necessitano del disco di installazione del sistema operativo.

1.4. Quando appare la finestra di dialogo [Firma digitale non trovata], selezionare [Continua] per Win XP oppure [Sì] per continuare in Win 2000.

1.5. Fare clic su [Chiudi] quando l’installazione è completata.

1.6. Riavviare il computer. Win98SE e ME si riavviano automaticamente.

2. Installazione dell’hardware VC-20

Importante:

Questa procedura deve essere eseguita solo dopo aver installato il software.

Alcuni duplicatori digitali necessitano di un kit di interfaccia per poter installare l’hardware VC-20. In caso di dubbi, contattare un tecnico dell’assistenza.

2.1. Collegare il cavo USB alla porta VC-20.

2.2. Collegare l’estremità opposta del cavo USB ad una porta USB disponibile nel computer.

2.3. Il computer rileverà automaticamente che è stato trovato il nuovo hardware. Nella finestra [Installazione guidata nuovo hardware] verificare che sia selezionata l’opzione [Installa il software automaticamente (consigliata)].

Importante:

Se i file del driver USB non vengono individuati automaticamente, indirizzare l’installazione a: c:\Programmi\VC-20\USB.

2.4. Fare clic su [Finish] nella finestra di dialogo [Completamento dell’Installazione guidata nuovo hardware in corso].

2.5. Il computer verrà riavviato automaticamente in Windows 98SE ed ME. In Windows 2000 ed XP, il computer richiederà di riavviare. Fare clic su [Sì].

Nota:

L’hardware VC-20 deve essere alimentato dalla porta USB del computer. Verificare che sia disponibile sufficiente alimentazione. VC-20 necessita di 200 mA.

❖ Español

Lea esto atentamente antes de utilizar este producto. Para un uso correcto y seguro, asegúrese de leer la Información de seguridad del "Manual de instrucciones" antes de utilizar este producto.

1. Instalación del software VC-20

Importante:

No conecte el cable USB al ordenador antes de instalar el software VC-20.

Para ejecutar este procedimiento de instalación, asegúrese de haber abierto sesión en el ordenador con derechos de administrador.

1.1. Inserte el CD-ROM en el ordenador.

1.2. Seleccione [Instalación rápida] para instalar el software VC-20.

1.3. Después de instalar el software, se abre automáticamente el Asistente de adición de impresoras [Add Printer Wizard]. Asegúrese de que las siguientes opciones están seleccionadas durante la instalación del driver de la impresora.

Printer Type - Local Printer (Tipo de impresora - Impresora local). Automatically detect plug & play printers (Detección automática de impresoras plug & play) – (NO seleccionada).

Port (Puerto) – Seleccione el puerto VC-20.

Printer Driver (Driver de impresora) – Vea la tabla de grupos de Duplicador Digital donde encontrará el driver correcto para el duplicador que esté usando.

Importante:

Windows 98SE y Windows ME no localizan automáticamente los archivos del driver de impresora. Instale el software directamente cuando se le solicite hacerlo siguiendo la ruta: c:\Program Files\VC-20\Printer.

Windows 98SE y Windows ME requieren el CD-ROM de instalación del sistema operativo.

1.4. Cuando aparezca el cuadro de diálogo [No se encontró la firma digital], seleccione [Continuar de todos modos] para Windows XP o [Sí] para continuar en Windows 2000.

1.5. Haga clic en [Cerrar] cuando haya completado la instalación.

1.6. Reinicie el ordenador. Windows 98SE y Windows ME se reiniciarán automáticamente.

2. Instalación del hardware VC-20

Importante:

Este procedimiento debe efectuarse únicamente después de instalar el software.

Algunos duplicadores digitales requieren un kit de interfaz para instalar el hardware de VC-20. Acuda a un técnico para confirmar este aspecto.

2.1. Conecte el cable USB al puerto VC-20.

2.2. Conecte el extremo opuesto del cable USB a un puerto USB disponible en el ordenador.

2.3. El ordenador detectará automáticamente que se ha instalado un nuevo hardware. En el Asistente de bienvenida al nuevo hardware [Welcome to the Found New Hardware Wizard], asegúrese de seleccionar la opción [Instalar el software automáticamente (recomendada)] .

Importante:

Si no se localizan automáticamente los archivos del driver USB, dirija la instalación a c:\Archivos de programa\VC-20\USB.

2.4. Haga clic en [Terminar] en el cuadro de diálogo del Asistente de nuevo hardware [Completing the Found New Hardware Wizard].

2.5. El ordenador se reiniciará automáticamente en Windows 98SE y Windows ME. En Windows 2000 y Windows XP, el ordenador solicitará el reinicio. Haga clic en [Sí].

Nota:

El VC-20 requiere alimentación eléctrica proveniente del puerto USB del ordenador. Por favor asegúrese de disponer de una cantidad suficiente de suministro eléctrico. El VC-20 requiere 200 mA.

❖ Nederlands

Lees dit zorgvuldig voordat u het product in gebruik neemt. Voor een veilig en correct gebruik dient u de veiligheidsinformatie in deze handleiding te lezen voordat u het apparaat in gebruik neemt.

1. De VC-20-software installeren

Belangrijk:

Sluit de USB-kabel pas op de computer aan nadat de VC-20-software is geïnstalleerd.

U kunt deze installatie alleen uitvoeren als u zich bij uw computer hebt aangemeld met beheerdersrechten.

1.1. Plaats de cd-rom in de computer.

1.2. Selecteer [Snelle installatie] om de VC-20-software te installeren.

1.3. Nadat de software is geïnstalleerd, wordt de [wizard Printer toevoegen] automatisch gestart. Selecteer de volgende opties tijdens de installatie van het printerstuurprogramma.

Type printer - Lokale printer. (Plug en Play-printers automatisch detecteren - NIET geselecteerd).

Poort - Selecteer de VC-20-poort.

Printerstuurprogramma - Zie de tabel Digitale duplicatorgroepen voor het juiste stuurprogramma voor de gebruikte duplicator.

Belangrijk:

Windows 98SE en ME zoeken niet automatisch naar de printerstuurprogrammabestanden. Als u wordt gevraagd om een pad op te geven, geeft u het volgende pad op: c:\Program Files\VC-20\Printer.

Bij Windows 98SE en ME hebt u de installatieschijf van het besturingssysteem nodig.

1.4. Wanneer het dialoogvenster [Kan digitale handtekening niet vinden] verschijnt, selecteert u [Toch doorgaan] voor Windows XP of [Ja] voor Windows 2000 om door te gaan.

1.5. Klik op [Sluiten] wanneer de installatie is voltooid.

1.6. Start de computer opnieuw op. Als u Windows 98SE of ME gebruikt, wordt de computer automatisch opnieuw opgestart.

2. De VC-20-hardware installeren

Belangrijk:

Deze procedure mag pas worden uitgevoerd nadat de software is geïnstalleerd.

Voor sommige digitale duplicators is een interfacekit vereist om de VC-20-hardware te installeren. Neem contact op met een technicus om dit te verifiëren.

2.1. Sluit het ene uiteinde van de USB-kabel aan op de VC-20-poort.

2.2. Sluit het andere uiteinde van de USB-kabel aan op een beschikbare USB-poort van de computer.

2.3. De computer zal automatisch detecteren dat er nieuwe hardware is geïnstalleerd. Bij de [wizard Nieuwe hardware gevonden] selecteert u de optie [De software automatisch installeren (aanbevolen)].

Belangrijk:

Indien de USB stuurprogramma's niet automatisch gevonden worden, bladert u dan naar de map c:\Program Files\VC-20\USB

2.4. Klik op [Voltooien] in het dialoogvenster van de [wizard Nieuwe hardware gevonden].

2.5. De computer zal automatisch opnieuw opstarten voor Windows 98SE en ME. Voor Windows 2000 en XP zal de computer u vragen om de computer opnieuw op te starten. Klik op [Ja].

Opmerking:

De VC-20 ontvangt stroom via de USB-poort van de computer. Zorg ervoor dat de stroomtoevoer volstaat. De VC-20 vereist 200 mA.

❖ Русский

Внимательно ознакомьтесь с настоящим документом перед началом эксплуатации данного изделия. Для безопасной и правильной эксплуатации данного изделия перед началом работы обязательно ознакомьтесь с разделом «Информация по технике безопасности» Инструкции по эксплуатации.

1. Установка программного обеспечения для VC-20

Запомните:

Не подключайте кабель USB к компьютеру до установки программного обеспечения для VC-20.

Для выполнения процедуры установки необходимо, чтобы пользователь, зарегистрированный в системе, обладает правами администратора.

1.1. Вставьте компакт-диск в дисковод для компакт-дисков.

1.2. Выберите [Быстрая установка] для установки программного обеспечения для VC-20.

1.3. После установки программного обеспечения автоматически запускается [Мастер установки принтеров]. Указывайте следующие параметры в процессе установки драйвера принтера.

Тип принтера – локальный принтер. (Автоматическое определение принтеров plug & play – НЕ выбрано).

Порт – порт VC-20.

Драйвер принтера – см. таблицу соответствия групп цифровых копировальных аппаратов и драйверов.

Запомните:

Операционные системы Win98SE и ME не определяют местоположение файлов драйверов принтеров автоматически. В ответ на запрос в процессе установки укажите путь c:\Program Files\VC-20\Printer.

Для Win 98SE и ME требуется установочный диск операционной системы.

1.4. При появлении сообщения [Цифровая подпись не найдена] для продолжения выберите [Продолжить в любом случае] в среде Win XP или [Да] в среде Win 2000.

1.5. Щелкните [Закрыть] по завершении установки.

1.6. Перезагрузите компьютер. Операционные системы Win98SE и ME перезагружаются автоматически.

2. Установка аппаратного обеспечения VC-20

Запомните:

Эта процедура должна выполняться только после установки программного обеспечения.

Для некоторых цифровых копировальных аппаратов требуется интерфейсный модуль для установки аппаратного обеспечения VC-20. Обратитесь для проверки к технику по обслуживанию.

2.1. Подсоедините кабель USB к порту VC-20.

2.2. Подсоедините другой конец кабеля USB к свободному порту USB на компьютере.

2.3. Компьютер автоматически определяет, что к нему подключено новое оборудование. При появлении окна [Мастер установки нового оборудования] убедитесь, что выбрана опция [Установить ПО автоматически (рекомендуется)].

Запомните:

Если местонахождение файлов драйвера USB не определяется автоматически, выберите для установки путь c:\Program Files\VC-20\USB.

2.4. Нажмите кнопку [Готово] в диалоговом окне [Завершение работы мастера установки нового оборудования].

2.5. При использовании ОС Windows 98SE и ME компьютер перезагрузится автоматически. При использовании ОС Windows 2000 и XP от компьютера поступит запрос на перезагрузку. Щелкните мышью на кнопке [Да].

Примечание:

Для VC-20 требуется питание от порта USB компьютера. Убедитесь, что обеспечивается достаточное питание. Номинальное значение тока для VC-20 составляет 200 мА.

❖ 简体中文

使用本产品前请仔细阅读该指南。为确保安全和正确使用，请务必在使用本产品前阅读"操作说明书"中的安全信息。

1. 安装VC-20软件。

重要事项：

在安装VC-20软件之前请勿将USB电缆插入计算机。

要运行此安装程序，请确保以具有管理权限的身份登录计算机。

1.1. 将CD ROM插入计算机。

1.2. 选择[快速安装]，安装VC-20软件。

1.3. 安装完此软件后，会自动运行[添加打印机向导]。安装打印机驱动程序时，请确保选中以下选项：

打印机类型 – 本地打印机。（自动检测即插即用打印机 – 不选中）。

端口 – 选择VC-20端口。

打印机驱动程序 – 请参阅数码印刷机分组表，确定所用印刷机正确的驱动程序。

重要事项：

Win98SE和ME不会自动查找打印机驱动程序文件。提示后将安装目录转到c:\Program Files\VC-20\Printer。

Win 98SE和ME要求操作系统的安装磁盘。

1.4. 出现没有找到数字签名对话时，在WinXP下选择仍然继续，或在Win 2000下选择是继续。

1.5. 安装完成后单击[关闭]。

1.6. 重新启动计算机。Win98SE和ME将自动重启。

2. 安装VC-20硬件。

重要事项：

此步骤必须仅在安装了软件后才执行。

某些数码印刷机需要界面软件包来安装VC-20硬件。请联系服务技术人员进行确认。

2.1. 将USB电缆连接到VC-20端口。

2.2. 将USB电缆的另一端连接到计算机上可用的USB端口。

2.3. 计算机将自动检测并找到新硬件。在[欢迎使用找到新硬件向导]中，确保选中了[自动安装软件(推荐)]。

重要事项：

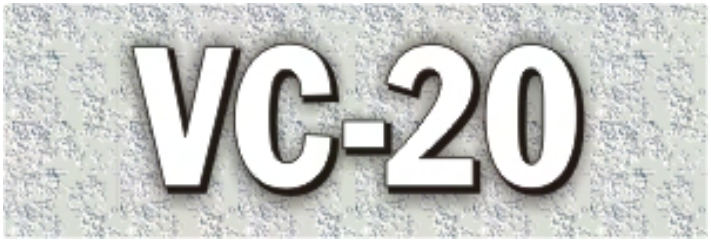
如果没有自动找到USB驱动程序文件，请将安装目录转到c:\Program Files\VC-20\USB。

2.4. 在[完成找到新硬件向导]对话框中，单击[完成]。

2.5. 对于Windows 98SE和Windows ME，计算机将自动重启。对于Windows 2000和XP，计算机将请求重启。请单击[是]。

注：

VC-20需要计算机的USB端口供电。请确保电力充足可用。VC-20要求200 mA的电流。



Operating Instructions

Version 1.3-2

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Introduction

This manual contains detailed instructions and notes on the operation and use of the VC-20. For your safety and benefit, read this manual carefully before using the VC-20. Keep this manual in a handy place for quick reference.

Important

Contents of this manual are subject to change without prior notice. In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.

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The proper names of the Windows operating systems are as follows:

- The product name of Windows® 98 is Microsoft® Windows® 98
- The product name of Windows® Me is Microsoft® Windows® Millennium Edition (Windows Me)
- The product name of Windows® 2000 are as follows:
  Microsoft® Windows® 2000 Server
  Microsoft® Windows® 2000 Professional
- The product name of Windows® XP are as follows:
  Microsoft® Windows® XP Professional
  Microsoft® Windows® XP Home Edition
- The product names of Windows Server TM 2003 are as follows:
  Microsoft® Windows Server TM 2003 Standard Edition

Manuals for this product

The manual provided is specific to the VC-20.

The manual is in PDF format. Adobe Acrobat Reader/Adobe reader is necessary to view the manuals.

Product description

The VC-20 is a USB 1.1 or USB 2 (full speed) interface for Digital Duplicators. The VC-20 can print directly from a PC to the Digital Duplicator. This will significantly improve the quality of printed material as well as speed up the printing jobs.

Contents

Introduction **3**
Manuals for this product **4**
Product description **4**

1. Getting Started **6**
Basic Specifications 6
Digital Duplicator Driver Groups 7
Package Contents VC-20 8

2. Installing the VC-20 ..... **9**
Requirements 9
Minimum Computer Specifications 9
Optional Computer Specifications 9
The VC-20 Software Components 10
Installing the VC-20 Printer Driver and Utilities 11
Installation Procedure for Windows 98SE, Windows ME, Windows 2000, Windows XP and Windows 2003 Server SE 13

3. Installing the VC-20 Hardware **20**
Connecting the VC-20 20

4. Basic Operation of the VC-20 ..... **22**
Turning on VC-20 22
Turning off VC-20 22
Printer Driver Properties 22
Setting and Monitoring Utility 26
VC-20 GUIClient Functions 27
Printing job with use of the VC-20 35

5. Uninstalling the VC-20 ..... **36**

6. Troubleshooting **39**

1. Getting Started

Basic Specifications

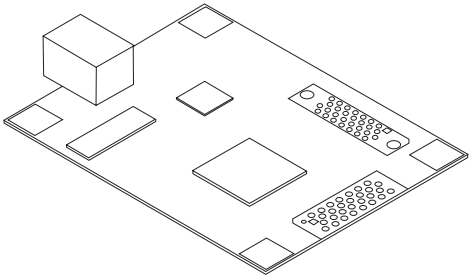
Printer Language:	Windows GDI
Supported Resolutions:	300 and 400 dpi
Graphics Screening:	Coarse, Fine, Line Art, Error Diffusion Density control supported
Supported Drivers:	Windows 98 2nd Edition, Windows ME, Windows 2000, Windows XP and Windows 2003 Server (Standard)
Ports:	USB 1.1 or USB 2.0 (Full Speed)
On Board Memory:	16 MB
Supported Digital Duplicator Brands:	Ricoh, Gestetner, Rex Rotary, Nashuatec, Savin, Standard and Lanier

Digital Duplicator Driver Groups

Driver Name	Digital Duplicator Model
VC-20 B4 300 GDI	DX 3440 / JP755 / CP6123b+ / JP785C / CP6200C
VC-20 LG 300 GDI	DX 3340 / CP6143L / LDD120 / 3180DNP / SD360 / JP735 / CP6123L+ LDD735 / CP6123a+
VC-20 A4 300 GDI	DX3240
VC-20 A3 400 GDI	DX 4542 / CP6244+ / LDD245 / 3270DNP / SD430
VC-20 B4 400 GDI	

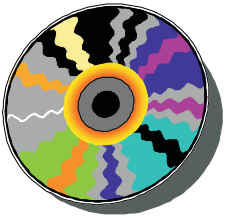
Package Contents VC-20

Check the following components are packed with the VC-20.



VC-20

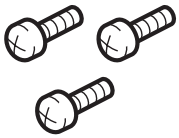
Installation Sheet



Installation CD

Installation CD

Safety Sheet



Screws (x3)

Important Note: The VC-20 is not supplied with a USB cable. This cable must be obtained separately.

2. Installing the VC-20

This section gives instructions for configuring the printer, and installing software and connecting the printer and computer.

Requirements

Before using this printer, make sure all environmental and electrical requirements are met.

Before beginning the installation, ensure the following:

- ✤ Ensure all of the items needed to complete a successful installation are available.
- ✤ Read the documentation to become familiar with the installation procedures.
- ✤ Have the following additional items available:
  - The User's Guide for the relevant Digital Duplicator.

Minimum Computer Specifications

The VC-20 requires an IBM compatible computer with a minimum specification of:

		Minimum	Recommended
1.	CPU	500 MHz	2GHz or more
2.	Hard Disk Drive	1 GB Free space	1 GB or more
3.	Memory	128MB	512MB or more
4.	Port	USB 1.1	USB 2.0
5.	Operating System	Win 98 SE or ME	Win 2000 or XP or 2003 Server SE

Optional Computer Specifications

To use the VC-20 User Interface, the TCP/IP networking protocol is required.

The VC-20 Software Components

The VC-20 software contains the following components:

VC-20PrinterServer
VC-20PrinterServer is the main software engine for the VC-20. It runs as a service application on the Windows operating system after installation.

Printer Driver
The GDI Printer Driver generates the print data.

USB Driver
The USB Driver enables the necessary support within the Windows operating system for the VC-20PrinterServer to communicate with the VC-20 hardware.

VC-20 GUIClient
The VC-20 GUIClient provides a graphical user interface which can be used to set and monitor functions of the VC-20. It is possible to print when the VC-20 GUIClient is not running.

Automatic Installer
The automatic installer on the CD-ROM assists to easily install all software components of the VC-20.

Installing the VC-20 Printer Driver and Utilities

Important: Do not plug the USB cable into the computer before the VC-20 software has been installed.

In order to run this install procedure, ensure the computer has been logged on with administrative rights.

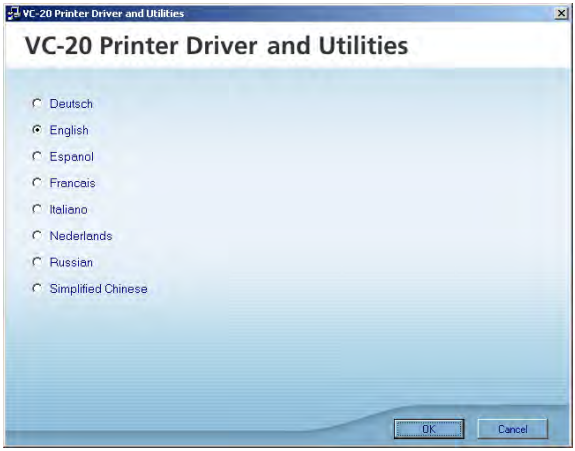
Before beginning the driver installation, ensure the Windows Operating System CD is available.

Before running this install CD, ensure all programs are closed and files saved.

The software is located on the VC-20 Printer Drivers & Utilities CD ROM. The VC-20 installation wizard will automatically run when the CD ROM is inserted into the computer.

VC-20 Printer Driver & Utilities autorun CD ROM

1. Insert the CD ROM into the computer.
2. Select the installation language required and click [OK].



3. Select from the following options.

   Quick Install - Installs the VC-20PrinterServer, VC-20 GUIClient, Printer Driver and USB Driver.

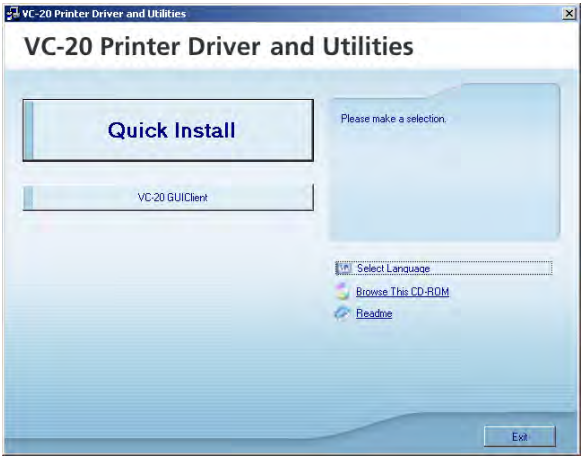
   VC-20 GUIClient - Installs the Setting & Monitoring Utility software.

   Select Language - Optional language selection.

   Browse the CD ROM - Browsing of all the files and folders on the CD ROM.

   Exit - Exits the installation wizard.

   Readme - Additional information not available at the time the manual was written.



Selecting Quick Install

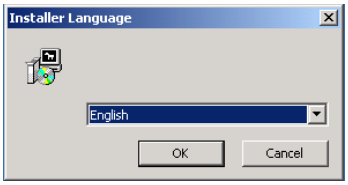
Selecting the Quick Install button will automatically begin the installation procedure to install the VC-20PrinterServer, VC-20 GUIClient, Printer Driver and USB Driver. Follow the procedures below for the operating system, the VC-20 will be installed onto.

Note: The installation procedure is the same for all supported operating systems. There may be minor differences in display of [Add Printer Wizard] as well, some order depending on the difference of operating system used.

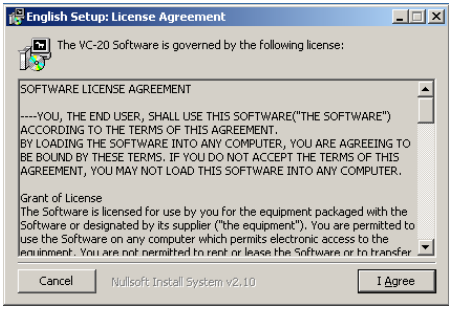
Important: When installing on Windows 98SE or ME, the operating system disk is required.

Installation Procedure for Windows 98SE, Windows ME, Windows 2000, Windows XP and Windows 2003 Server SE

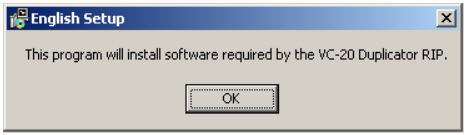
1. Select the language required and click **[OK]**.



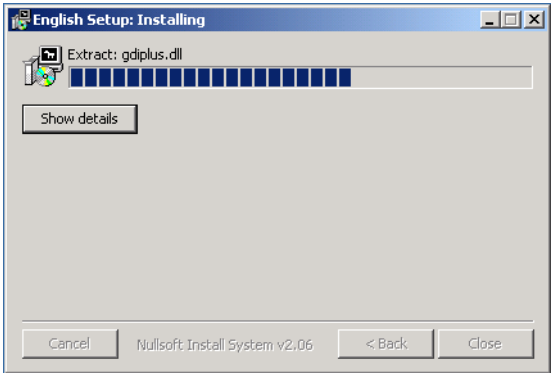
2. Select **[I Agree]** to the VC-20 Software License Agreement.


English Setup: License Agreement
The VC-20 Software is governed by the following license:
SOFTWARE LICENSE AGREEMENT
----YOU, THE END USER, SHALL USE THIS SOFTWARE("THE SOFTWARE") ACCORDING TO THE TERMS OF THIS AGREEMENT.
BY LOADING THE SOFTWARE INTO ANY COMPUTER, YOU ARE AGREEING TO BE BOUND BY THESE TERMS. IF YOU DO NOT ACCEPT THE TERMS OF THIS AGREEMENT, YOU MAY NOT LOAD THIS SOFTWARE INTO ANY COMPUTER.
Grant of License
The Software is licensed for use by you for the equipment packaged with the Software or designated by its supplier ("the equipment"). You are permitted to use the Software on any computer which permits electronic access to the
Cancel
Nullsoft Install System v2.10
I Agree

3. Click **[OK]** to begin the installation procedure.



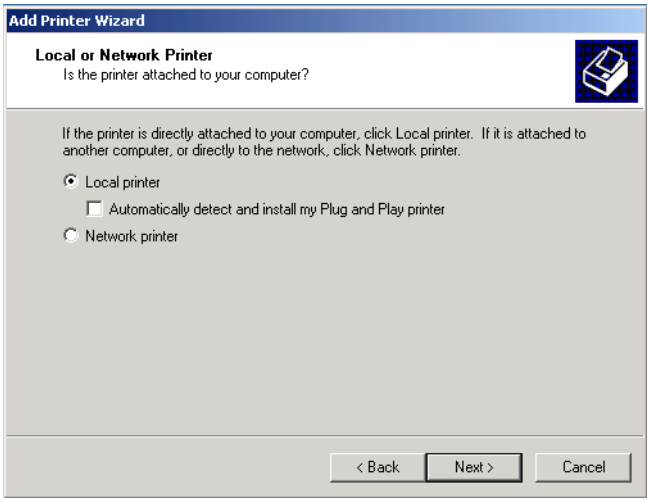
4. The installation will commence.



5. Windows 2000 and XP only. On completion of the initial installation procedure, the **[Windows Add Printer Wizard]** will automatically open. Click **[Next]**.

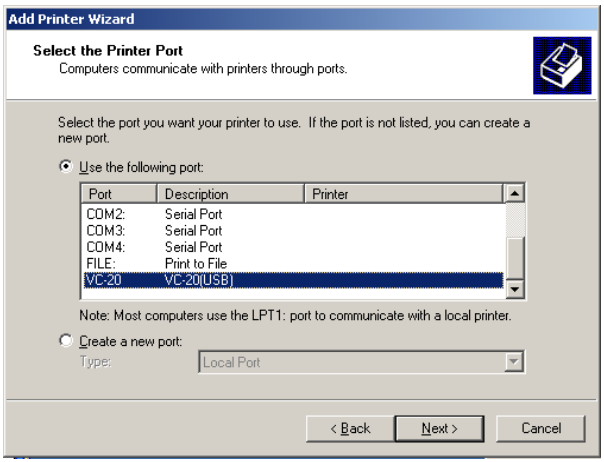
Add Printer Wizard
Welcome to the Add Printer Wizard
This wizard helps you install a printer or make printer connections.
To continue, click Next.
< Back
Next >
Cancel

6. Select **[Local printer]**. For Windows 2000 and XP, ensure **[Automatically detect and install my Plug and Play printer]** is not selected. Click **[Next]**.


Add Printer Wizard
Local or Network Printer
Is the printer attached to your computer?
If the printer is directly attached to your computer, click Local printer. If it is attached to another computer, or directly to the network, click Network printer.
Local printer
Automatically detect and install my Plug and Play printer
Network printer
< Back
Next >
Cancel

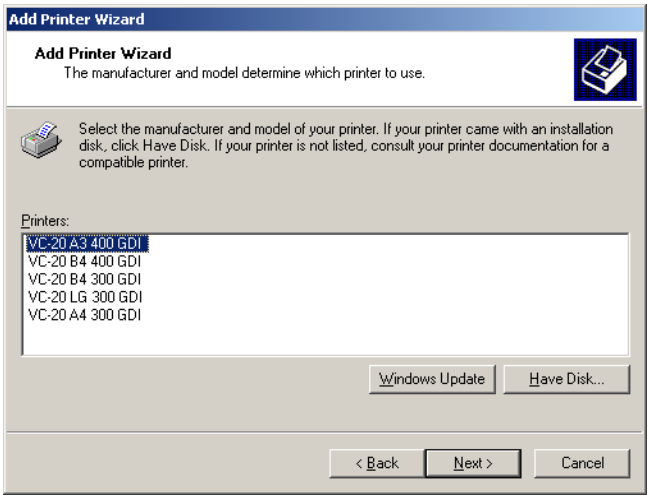
7. For Windows 2000 and XP, in the **[Select the Printer Port]** dialogue box, select the VC-20 port. Click **[Next]**.

   For Windows 98SE and ME go to step 8 first and then step 7.


Add Printer Wizard
Select the Printer Port
Computers communicate with printers through ports.
Select the port you want your printer to use. If the port is not listed, you can create a new port.
Use the following port:
Port
Description
Printer
COM2: Serial Port
COM3: Serial Port
COM4: Serial Port
FILE: Print to File
VC-20 VC-20(USB)
Note: Most computers use the LPT1: port to communicate with a local printer.
Create a new port:
Type:
Local Port
< Back
Next >
Cancel

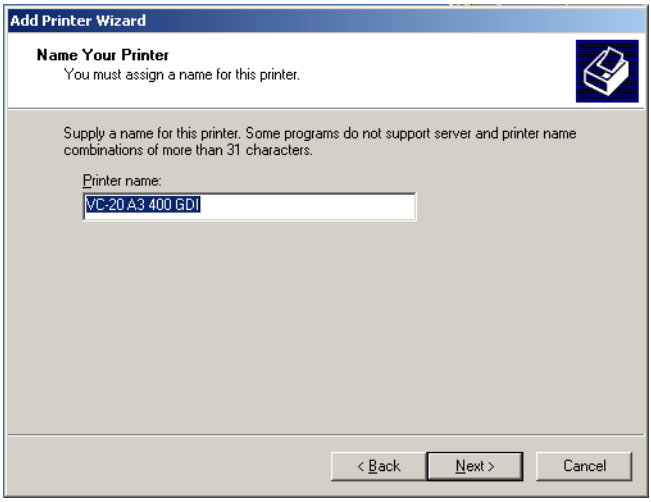
Note: **Windows 98SE and Windows ME do not automatically direct the installation to the printer driver files that are installed onto the computer. Click [Have Disk] and direct the installation to c:\Program Files\VC-20\Printer. Ensure the oemsetup.inf file is selected. Click [OK].**

8. Select the VC-20 driver that matches the appropriate Digital Duplicator. Refer to the **Digital Duplicator Driver Groups** table in the front of this manual.

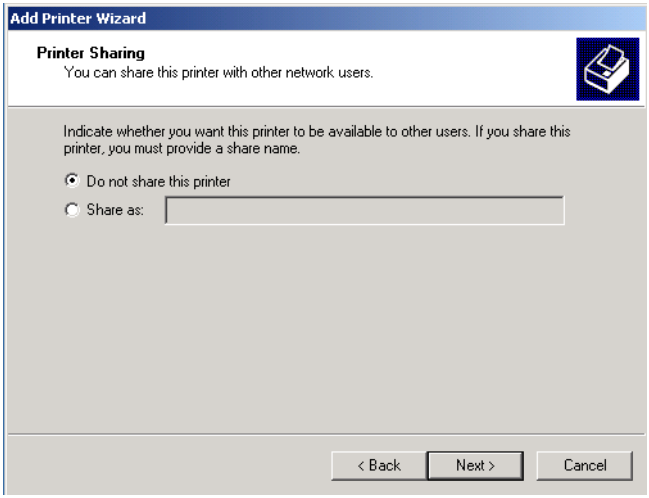

Add Printer Wizard
Add Printer Wizard
The manufacturer and model determine which printer to use.
Select the manufacturer and model of your printer. If your printer came with an installation disk, click Have Disk. If your printer is not listed, consult your printer documentation for a compatible printer.
Printers:
VC-20 A3 400 GDI
VC-20 B4 400 GDI
VC-20 B4 300 GDI
VC-20 LG 300 GDI
VC-20 A4 300 GDI
Windows Update
Have Disk...
< Back
Next >
Cancel

Note: **For Windows 98SE and ME, the port selection dialogue box will appear. Go to step 7.**

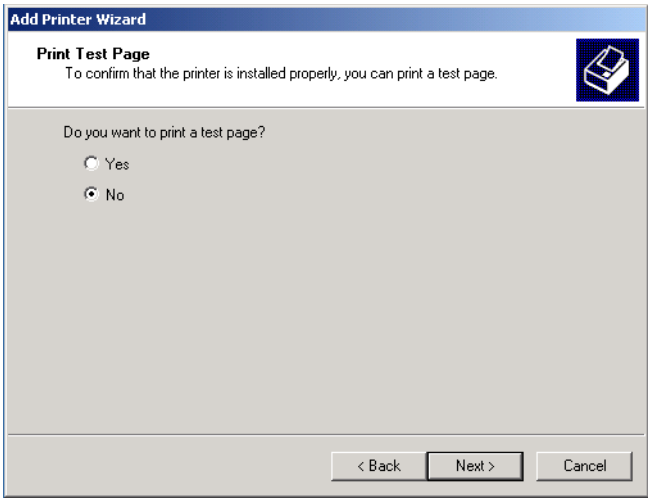
9. Change the **[Printer name]** if required. Click **[Next]**.


Add Printer Wizard
Name Your Printer
You must assign a name for this printer.
Supply a name for this printer. Some programs do not support server and printer name combinations of more than 31 characters.
Printer name:
VC-20 A3 400 GDI
< Back
Next >
Cancel

10. Select if the printer will be shared on a network or not. Click **[Next]**.


Add Printer Wizard
Printer Sharing
You can share this printer with other network users.
Indicate whether you want this printer to be available to other users. If you share this printer, you must provide a share name.
Do not share this printer
Share as:
< Back
Next >
Cancel

11. Select **[No]** or **[Yes]** to print a test page and click **[Next]**.


Add Printer Wizard
Print Test Page
To confirm that the printer is installed properly, you can print a test page.
Do you want to print a test page?
Yes
No
< Back
Next >
Cancel

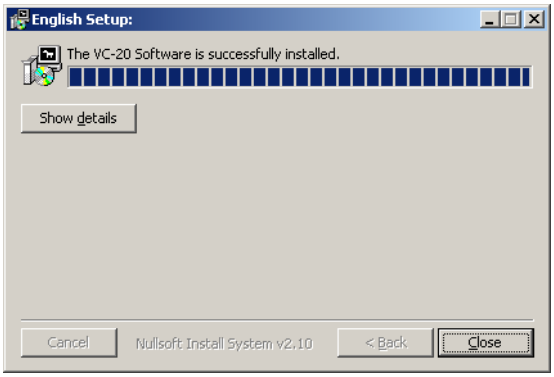
12. For Windows 2000 and XP only. At the **[Completing the Add Printer Wizard]**, click **[Finish]**.

13. The printer driver will be installed.

    For Windows 2000 and XP, Windows displays a warning message relating to the certification of the driver, select the option to continue with the installation.

    For Windows 98SE and ME. The computer will automatically reboot.

14. For Windows 2000 and XP only. When the installation procedure is complete, click **[Close]** in the VC-20 Setup utility.



Note: **To Install the printer driver only**

Select [Printers and Faxes] for Windows XP or [Printers] for Windows 2000 and Win9X, from [Settings] in the [Start] menu. Double click the [Add printer] icon and follow the [Add Printer Wizard]. When prompted browse for the VC-20 printer drivers in the following location on the hard drive of the computer.

c:\Program files\VC-20\Printer\

Alternatively, insert the VC-20 Printer Driver & Utilities CD ROM and browse for the printer driver file.

3. Installing the VC-20 Hardware

This section describes connecting the hardware of the VC-20 and the computer.

Connecting the VC-20

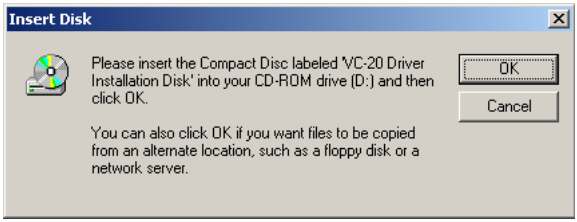
Important: This procedure must only be done after the software has been installed.

1. Connect the USB cable to the VC-20 port on the chassis of the Digital Duplicator.
2. Connect the opposite end of the USB cable to an available USB port on the computer.
3. The computer will automatically detect that new hardware has been found.

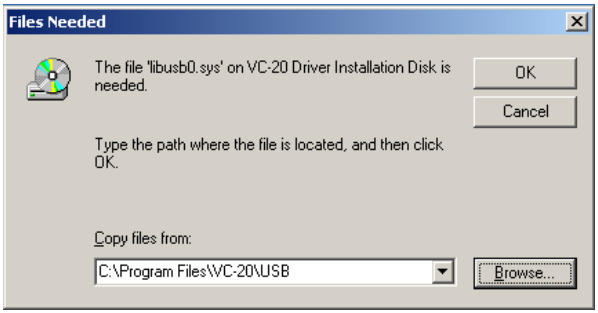
4. The computer will start searching for the VC-20 USB drivers that have been installed.

5. The VC-20 software will be installed.

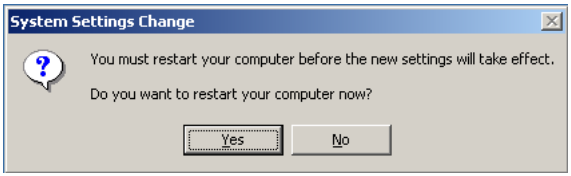
6. The computer will open the [Files Needed] window. Select [OK].


Insert Disk
Please insert the Compact Disc labeled 'VC-20 Driver Installation Disk' into your CD-ROM drive (D:) and then click OK.
You can also click OK if you want files to be copied from an alternate location, such as a floppy disk or a network server.
OK
Cancel

7. At the prompt, direct the installation procedure to c:\Program Files\VC-20\USB to locate the [libusb0.sys].


Files Needed
The file 'libusb0.sys' on VC-20 Driver Installation Disk is needed.
OK
Cancel
Type the path where the file is located, and then click OK.
Copy files from:
C:\Program Files\VC-20\USB
Browse...

8. For Windows 2000 and XP the [System Settings Change] window will open and will ask to restart the computer. Click [Yes]. For Windows 98SE/ME a message "Computer need to reboot" will appear. Click [OK] and the computer will automatically reboot. The VC-20 is ready to be used.


System Settings Change
You must restart your computer before the new settings will take effect.
Do you want to restart your computer now?
Yes
No

4. Basic Operation of the VC-20

After completing all the installation procedures and installation of the relevant driver for the Digital Duplicator being connected to, the VC-20 is ready for use.

Turning on VC-20

Connect the USB cable between the VC-20 and the computer.

Turning off VC-20

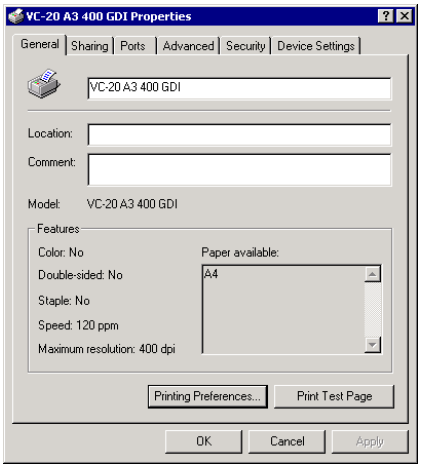
Disconnect the USB cable between the VC-20 and the computer.

Printer Driver Properties

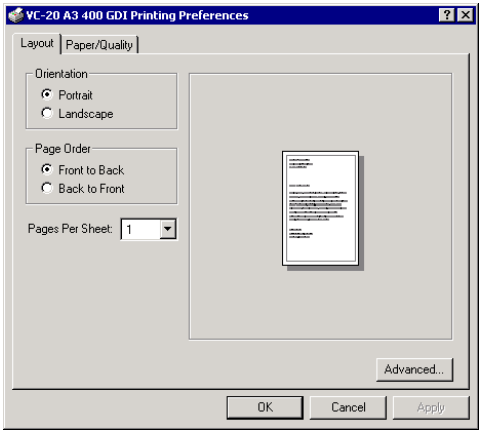
The VC-20 Printer Driver properties contains functions that are specific to the digital duplicator. To access the functions and for a description of each function see below.

Note: For Windows 98SE and ME the only supported function is Image Rotation. Selected in the [Device Option] tab.

1. Select the VC-20 printer driver installed in the Windows printers dialogue box.
2. Right click on the VC-20 printer driver and select [Properties].



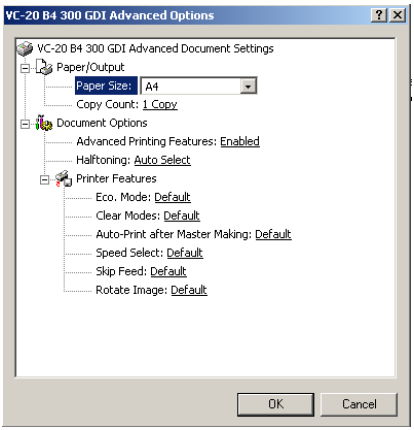
3. In the [Properties] dialogue box select [Printing Preferences]. In the case of Windows 98SE and ME, select the [Device Options] tab.



4. Select [Advanced] from the [Layout] tab of the [Printing Preferences] dialogue box.

   The digital duplicator functions are displayed. These functions can be set when a job is printed and will revert back to default on completion of the print.

   To setup particular functions as default, select [Printing Defaults] from the [Advanced] tab of the [Properties] dialogue box and apply the settings.



Function	Options	Further Options	Description
Paper/Output	Paper Size	All supported paper sizes listed	Select paper size
	Copy Count	1-9999	Select number of prints
Document Options	Advanced Printing Features	Enable Disable	Activate the advanced printing features Deactivate the advanced printing features
	Halftoning	Auto Select Super Cell Dither 6 x 6 Dither 8 x 8	Windows selects an option Added gray levels Each spot = max 6x6 dots Each spot = max 8x8 dots
	Printer Features	Eco. Mode Default Off On	See duplicator manual Duplicator operator panel setting VC-20 disables mode VC-20 enables mode
		Clear Mode Default On	See duplicator manual Duplicator operator panel setting VC-20 enables mode
		Auto-Print after Master Making Default Off On	See duplicator manual Duplicator operator panel setting VC-20 disables mode VC-20 enables mode

Function	Options	Further Options	Description
Document Options	Printer Features	Rotate Image Default 180^0	Image rotation Set Off as default. VC-20 rotates image by 180
		Speed Select Default 1 Slow 2 3 Normal 4 5 Fast	See duplicator manual Duplicator operator panel setting VC-20 sets print speed to slowest VC-20 sets print speed to 2 VC-20 sets print speed to normal VC-20 sets print speed to 4 VC-20 sets print speed to fastest
		Skip Feed Default Off 2 4 6	See duplicator manual Duplicator operator panel setting VC-20 disables mode VC-20 sets 2 skips VC-20 sets 4 skips VC-20 sets 6 skips

For more detail descriptions of the digital duplicator functions refer to the digital duplicator's operators manual.

Setting and Monitoring Utility

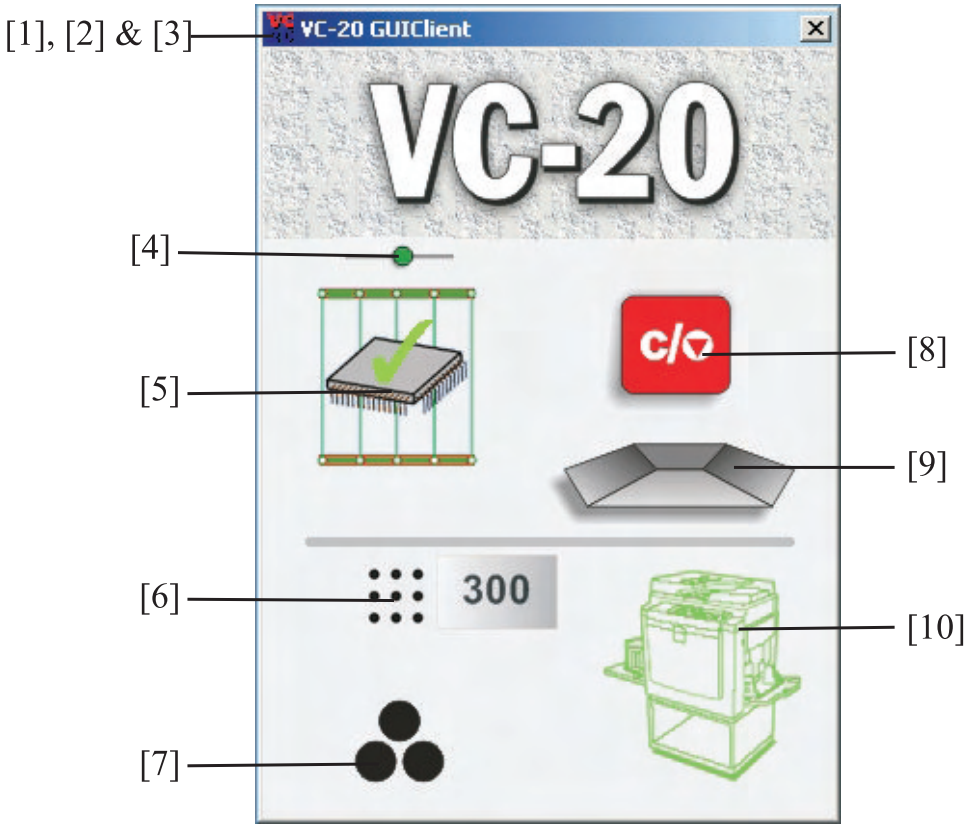
The VC-20 comes with a setting and monitoring utility called [VC-20 GUIClient]. This application is automatically installed during the software and printer driver installation described in section 2 of this manual. The Setting and Monitoring Utility has the following functions:

1. Monitor the condition of the VC-20 and the Digital Duplicator.
2. Cancel print jobs.
3. Set logging levels and define paper size mismatch prompt behavior.
4. Displays version information.
5. Define the spool path of print files sent to the VC-20.
6. Define the IP address of the computer directly connected to the VC-20.

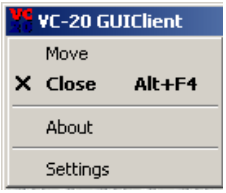
To run [VC-20 GUIClient], select "Start", "Programs" (for XP "All programs"), "VC-20", "VC-20 GUIClient."

Note: The VC-20 can also conduct print jobs without running the [VC-20 GUIClient] setting and monitoring utility.

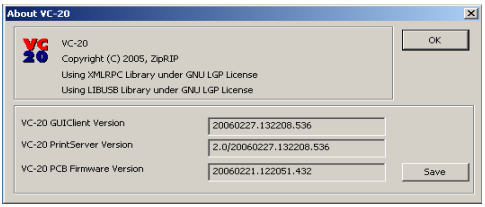
VC-20 GUIClient Functions

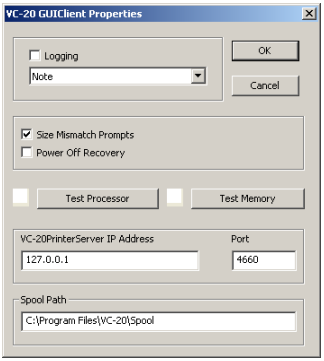


Item	Description	Function
[1]	Drop down menu	Access to version information and VC-20 settings.



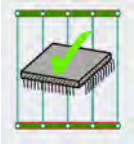
[2]	About VC-20	Displays the VC-20 GUIClient version, VC-20PrinterServer version and the VC-20 PCB Firmware version.

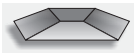
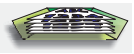


Item	Description	Function
[3]	Settings	Displays the different settings that can be applied to the VC-20.
		
	Logging	Default is not selected. If selected logs VC-20 and duplicator status information. [Note] logs maximum detail. [Critical] logs minimum information. Note: Reboot the PC to effect this change.

Item	Description	Function
	Size Mismatch Prompts	Enabled - If **[VC-20 GUIClient]** is running, **[VC-20 GUIClient]** will warn if a paper size mismatch has been detected and prompt to **[Cancel]** or **[Retry]** or **[Ignore]**. Disabled - **[VC-20 GUIClient]** will not warn if a paper size mismatch has occurred. Size Mismatch Prompts function only applies to duplicators that have paper size detection capability. Note: Reboot the PC to effect this change.
	Power Off Recovery	Enabled - VC-20 will resume master making from the last page printed if the duplicator was powered off during a multipage job. Disabled - VC-20 will not resume a multipage job interrupted by a duplicator power off. Note: Reboot the PC to effect this change.
	Test Processor	Tests the processor of the VC-20. Displays green square if processor is detected and functioning. Displays red square if the processor is not detected or not functioning.
	Test Memory	Tests the memory of the VC-20. Displays green square if memory is functioning. Displays red square if

Item	Description	Function
		memory is not functioning.
	VC-20PrinterServer IP Address	IP address of the computer the VC-20 is installed on. Default 127.0.0.1 [VC-20 GUIClient] is installed on the same PC as VC-20. Note: Restart the [VC-20 GUIClient] for this setting to take effect.
		Port TCP/IP port used by [VC-20PrinterServer] to communicate with [VC-20 GUIClient]. Default 4660. Note: Reboot the PC for this setting to take effect.
		Spool Path Displays the spool path that print files are sent to. Note: Reboot the PC for this setting to take effect.
[4]	VC-20PrinterServer Monitoring	Displays connection status between [VC-20PrinterServer] and [VC-20 GUIClient].
		Connected
		Disconnected

Item	Description	Function
[5]	VC-20 Monitoring	Displays VC-20 status.
		VC-20 connected.
		VC-20 not connected.
[6]	Duplicator Resolution	The [VC-20 GUIClient] detects and display the resolution of the duplicator the VC-20 is connected to.
	300	300dpi duplicator detected.
	400	400dpi duplicator detected.
[7]	Drum Colo(u)r	The [VC-20 GUIClient] displays black drum or colo(u)r drum loaded in the duplicator.
		Black type drum in the duplicator.
		Colo(u)r type drum in the duplicator.

Item	Description	Function
[8]	Job Cancel Button	Select to cancel a print job.
		Cancel print job.
		Orange when job is being cancelled.
[9]	Job Tray	Displays if a job is being processed by the VC-20.
		Job tray empty.
		Job being processed.
		PC sending page to VC-20 memory.
[10]	Duplicator Monitoring	Monitors and displays the status of the duplicator.
		Duplicator not found.
		Duplicator ready.

Item	Description	Function
		Duplicator error

Note: **"Duplicator Error" symbol will also be shown if the Duplicator is in "Print Not Finished" condition. To clear this error the print job should be completed on the Duplicator.**

		Duplicator busy.

Printing job with use of the VC-20

Before sending a print job, ensure the correct size paper is loaded in the machine. If the VC-20 does not find the size of paper that it is required to print on from the printer driver, it will indicate a paper mismatch error if [Size Mismatch Prompt] is enabled.

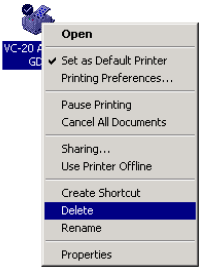
To print to the VC-20, select the print option from the file menu of the application. In the print dialogue window, select the VC-20 driver installed and set the quantity of prints required. In the properties section in the print dialogue box, choose the size of paper the job is to be printed on. Once these selections have been made, press [Print] or [OK] depending on the application.

The file is processed by the VC-20. If the [VC-20 GUIClient] application is running, the [Job Tray] function will indicate a job is being sent. See [VC-20 GUIClient] function table. When the processing is complete, the Digital Duplicator icon will change from green to orange and the master will be cut.

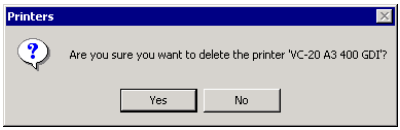
5. Uninstalling the VC-20

This section describes uninstalling the VC-20 GUIClient software and the VC-20 printer driver.

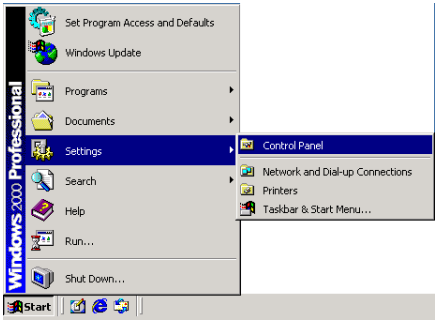
1. Disconnect the USB cable from the computer.
2. Select [Printers] from [Settings] in the Start menu.
3. Select and right click on the VC-20 driver. Select [Delete].



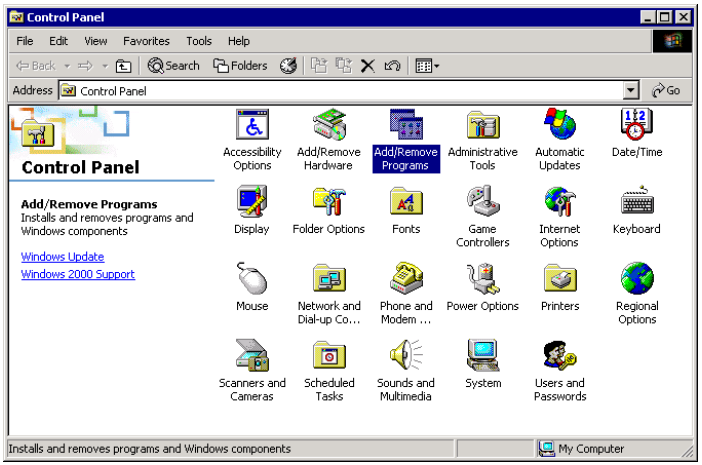
4. Click [Yes] to confirm the deletion.



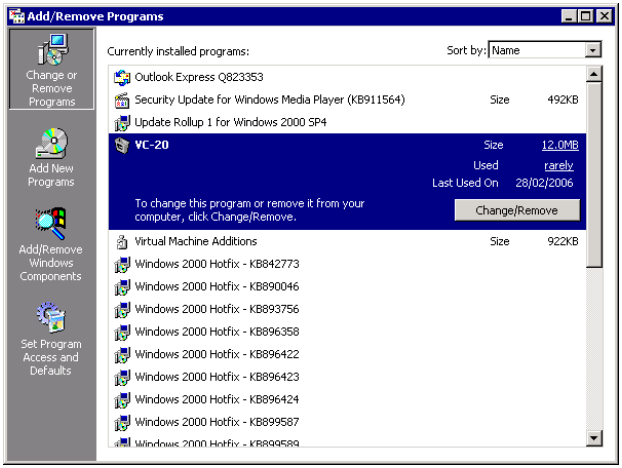
5. Select [Control Panel] from [Settings] on the [Start] menu.



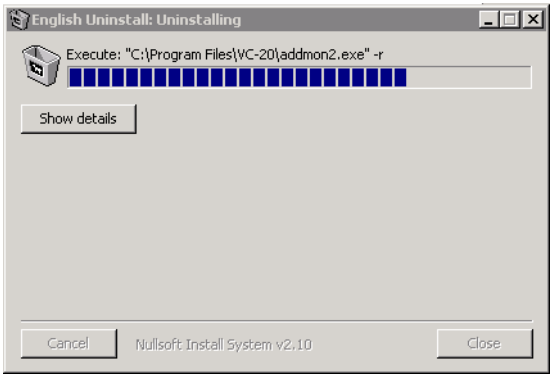
6. Select “Add or Remove Programs”.

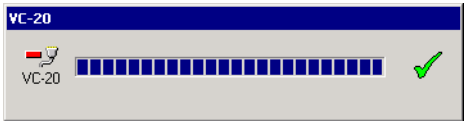


7. Scroll and locate the VC-20 GUIClient application.
8. Select the program and click “Change/Remove”.


Add/Remove Programs
Change or Remove Programs
Add New Programs
Add/Remove Windows Components
Set Program Access and Defaults
Currently installed programs:
Sort by: Name
Outlook Express Q823353
Security Update for Windows Media Player (KB911564) Size 492KB
Update Rollup 1 for Windows 2000 SP4
VC-20 Size 12.0MB
Used rarely
Last Used On 28/02/2006
To change this program or remove it from your computer, click Change/Remove.
Change/Remove
Virtual Machine Additions Size 922KB
Windows 2000 Hotfix - KB842773
Windows 2000 Hotfix - KB890046
Windows 2000 Hotfix - KB893756
Windows 2000 Hotfix - KB896358
Windows 2000 Hotfix - KB896422
Windows 2000 Hotfix - KB896423
Windows 2000 Hotfix - KB896424
Windows 2000 Hotfix - KB899587

9. The VC-20 GUIClient uninstall port monitor will display during the uninstall procedure. A green tick will confirm completion.





6. Troubleshooting

Check the steps below and refer to the table to solve problems with the VC-20.

1. Check that the USB cable is securely connected to the Digital Duplicator and the computer.
2. Check the both computer and the Digital Duplicator are powered on.
3. Check that all operator recoverable errors are cleared on the Digital Duplicator.
4. Open the **[VC-20 GUIClient]** user interface and check that the Digital Duplicator and the VC-20 have been detected.
5. Open the **[Device Manager]** and check that the VC-20 hardware is installed. A yellow warning triangle indicates a problem. Refer to the table on the next page.
6. Check that the VC-20 printer driver is connected to the port named **[VC-20]**.
7. Check that the **[VC-20PrinterServer]** service is running.
8. Check that the VC-20 printer driver is installed and is the correct driver for the connected Digital Duplicator. Refer to the Digital Duplicator Drivers Group Table.

The table on the next page describes errors or problems which can occur, the cause and the resolution.

Error	Cause	Solution
The [VC-20 GUIClient] does not detect the VC-20	The VC-20 USB driver is not installed.	Install the VC-20 software from the installation CD-ROM.
	The VC-20 is not connected to the computer.	Connect the VC-20 to the computer with the USB cable.
	The [VC-20 GUIClient] is not set to the computer that the VC-20 is installed on.	In [VC-20 GUIClient] Settings, the dialogue called VC-20 GUIClient Properties, must be set as follows. [VC-20PrinterServer IP Address] enter the IP address of the computer that is connected to the VC-20. [Port] enter 4660. (If the GUIClient is on the same computer as the VC-20 then the IP address entry for [VC-20PrinterServer IP Address] should be 127.0.0.1)
	A firewall is blocking [VC-20 GUIClient] from connecting to the VC-20 [VC-20PrinterServer] service.	Configure the firewall to allow access to the computer that the VC-20 is installed on.
The VC-20 is not located in the [Device Manager] on the computer.	The USB cable is not connected.	Connect the USB cable between the computer and the Digital Duplicator.

Error	Cause	Solution
The [VC-20 GUIClient] does not detect the Digital Duplicator.	The Digital Duplicator is switched off.	Switch the Digital Duplicator on.
	There is a fault with the Digital Duplicator.	Restart the Digital Duplicator. Restart the computer the VC-20 is connected to. If the problem persists, contact the service technician.
The VC-20 is not located in the [Device Manager] on the computer.	The USB cable is not connected.	Connect the USB cable between the computer and the Digital Duplicator.
The VC-20 is located in the [Device Manager] but there is a yellow question mark next to the entry.	The USB driver is not installed correctly.	Install the VC-20 software from the installation CD ROM.
	The computer has not initialized the VC-20 correctly.	Disconnect and reconnect VC-20 USB cable.
	The computer operating system has not assigned resources to the VC-20.	Restart the computer.
	There is insufficient power on the USB Port for the VC-20.	Disconnect any other USB devices connected to the same USB port or hub that the VC-20 is installed on.

Error	Cause	Solution
The VC-20PrinterServer is not located in Windows Services	The VC-20 software has not been installed correctly	Install the VC-20 software from the installation CD ROM
There is no VC-20 port available in the printer drivers port section	The VC-20 software has not been installed correctly	Install the VC-20 software from the installation CD ROM
The image printed on the Digital Duplicator is reduced or enlarged in size	The incorrect printer driver is installed for the Digital Duplicator	Delete the incorrect printer driver and install the correct printer driver. Refer to the Digital Duplicator Driver Groups Table for the correct driver.
The printer driver says the printer is off-line	The VC-20 spool directory is inaccessible to the current user logged on to the computer	Change the spool directory location to where all users have read and write permission. Restart the computer.
		Allow all users read and write permissions to the spool directory.

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